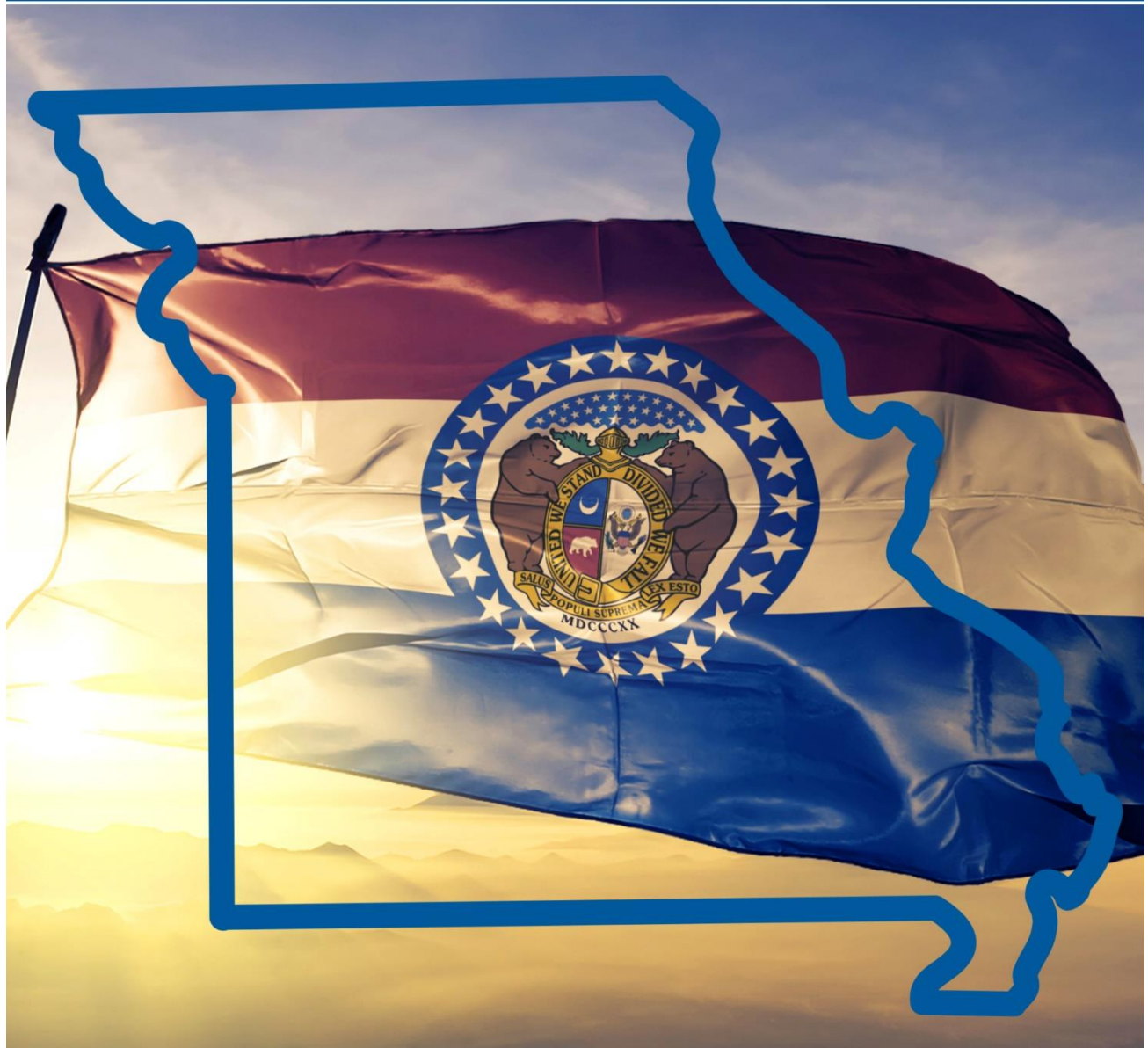


State of Missouri Office of Administration SMALL BUSINESS IMPACT STUDY 2022



UMKC Institute for
Human Development
A University Center for Excellence in Developmental Disabilities



Table of Contents

List of Tables and Figures	iv
About the Team	vi
I. Executive Summary	8
A. Overview	8
B. Objectives	9
C. Findings in Brief	10
D. Study Methodology and Data	12
Qualitative Analysis	12
Availability Study	12
Utilization Study	12
Statistical Analysis of Disparity	13
Policy and Practice Review	13
Legal Analysis	14
E. Recommendations Summary	14
II. Legal Standards for State Contracting Affirmative Action Programs	17
A. Introduction of Legal Standards	17
B. Overview of Affirmative Action in Government Contracting	17
C. Framework for Legal Analysis of Government Affirmative Action Program	19
Two Types of Equal Protection Challenges:	19
The Guiding Principles Set Forth in City of Richmond v. J.A. Croson:	19
Strict Scrutiny Applies to Race Conscious Programs:	21
Gender-Conscious Programs Must Satisfy Intermediate Scrutiny:	23
D. Evidence Needed to Meet the Coson Standard	24
E. Recent Developments: What Type of Evidence Have Courts Sanctioned	26
F. Conclusion of Legal Standards	31
III. Availability, Utilization and Disparities for the State of Missouri	32
A. The Availability Analysis	32
B. Utilization Analysis	37
Contract Data Sources and Sampling Method	37
Data Sources and Sampling Method	37
Utilization Analysis	38
The State of Missouri Product Market	42
Missouri's Geographic Market	47
Utilization of MBE & WBE in Missouri's Market Area	48
C. Statistical Analysis of Disparity	55
Methodological Framework	55
Estimation of M/WBE Availability	56
IV. Analysis of Race and Gender Barriers in the Missouri Economy	60
A. Disparities in Firm Size and Payroll	61
B. Inferential Analysis of Disparities in Wages	62
C. Inferential Analysis of Disparities in Business Formation	67
D. Disparities in Business Formation: Literature Review	73
E. Conclusion	74
V. Analysis of Chapter 8 Contracts	75
A. Contract Data Sources and Sampling Method	75
B. Data Sources and Sampling Method	75

C. Utilization Analysis.....	75
D. The State of Missouri Product and Geographic Markets.....	79
FMDC Product Market	79
E. Missouri’s Geographic Market.....	81
F. Utilization of MBE & WBE in Missouri’s Market Area.....	82
G. Statistical Analysis of Disparity.....	87
Estimation of M/WBE availability.....	87
VI. Current and Past Procurement Practice Review	91
A. Sources and Methodology.....	91
B. Procurement Authority Overview	92
C. Contract Evaluation Overview: Purchasing	93
D. Contract Evaluation Overview: Facilities Management, Design and Construction (FMDC)	94
E. Office of Equal Opportunity.....	96
F. Review of Other Executive Departments	98
G. Current and Past Procurement Practice: Findings	105
Barriers:	105
Resources:	106
Systems:.....	107
Goals:.....	107
VI. Qualitative Evidence of Race and Gender Barriers in the Missouri Economy.....	109
Procedure.....	109
Participant Demographics	110
Analysis of Maps.....	111
Coding	111
Analysis	111
Results	111
VII. Recommendations for the State of Missouri’s Minority- and Woman-Owned Business	
Enterprise Program	119
A. State Contracting and Procurement Policies and Processes	119
B. M/WBE Program Elements and Procedures	120
C. Conclusion.....	121
Appendices	123
Appendix A: Supplemental Tables and Analysis	123
Appendix B: Small Business Map Code Book.....	127
Appendix C: 2014 Disparity Study Recommendations Review.....	129
Appendix D: MBE and WBE Contractors, Number of Contracts and Dollar Amount Awarded for FMDC Sample	130
Appendix E: Legal Table of Authorities.....	131
References	133
Glossary	134

About the Team

The Small Business Impact Study (hereafter referred to as, “the Study”) was researched and written by a multidisciplinary team of faculty and researchers housed at the University of Missouri- Kansas City (UMKC). The team represents a wide range of professional and academic expertise: education psychology, public administration and public policy, law, economics, and social science research methods.

Two UMKC research centers collaborated on the Study: The Midwest Center for Nonprofit Leadership (MCNL) and the Institute for Human Development (IHD).

The Midwest Center for Nonprofit Leadership is the nonprofit academic center of the Henry W. Bloch School of Management at the University of Missouri- Kansas City. For over thirty years, MCNL has worked to enhance the performance and effectiveness of individuals and organizations in the nonprofit sector through high-quality programs of community-oriented education, applied research, problem solving and service. MCNL is a center for learning, a center for inquiry and dialogue, and a center for the support and renewal of the people and organizations that serve our communities. MCNL serves more than four thousand community leaders every year through its leadership, management, and board development programs; more than 45,000 leaders have participated in Center programs since its founding in 1991. MCNL accomplishes all of this through a variety of education and professional development offerings and partnerships, creating opportunities for professional educational renewal and the sharing of knowledge and information about ethical and effective services to our regional communities. Key to MCNL’s work is community-based applied research.

The Institute for Human Development has been providing community-oriented research and programming to families and individuals with developmental disabilities for forty-five years. IHD works with a wide variety of partners across all levels – local, state, regional, and national – tackling persistent challenges people and families face throughout the life span, from infancy to late adulthood. IHD’s focus is on community inclusion and social belonging for all, striving to improve overall quality of life. IHD conducts research to gain insights into the problems, determinants, and impacts regarding social, economic, cultural, or environmental factors impacting policy and programs. Research efforts that achieve these insights include both quantitative and qualitative methodologies with special emphasis on community-based participatory research (CBPR). This approach combines the strengths of an interdisciplinary team of researchers and community partners to extract deep knowledge, guide decision-making, and demonstrate impact regarding programs and services.

The University of Missouri-Kansas City (UMKC), one of four University of Missouri campuses, is a public university serving more than 16,000 undergraduate, graduate and professional students. UMKC engages with the community and economy based on its mission: placing student success at the center; leading in life and health sciences; advancing urban engagement; excelling in visual and performing arts; embracing diversity; and promoting research and economic development.

Team Membership

Melissa Patterson Hazley, Ph.D. Team Co-lead. Dr. Patterson Hazley is Director of Community-Based Research, Evaluation, and Training at the Institute for Human Development. A graduate of the University of Nebraska-Lincoln (2016), Patterson Hazley's action-oriented research focuses on strategies to empower families and communities in support of individuals with disabilities.

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Monica Rezac, Ph.D. Dr. Rezac is Research Coordinator at the Midwest Center for Nonprofit Leadership. Her research interests also include arts-based research, qualitative studies, and mixed methods approaches. Dr. Rezac's role with MCNL includes providing research support for organizations and ongoing projects, data collection for evaluation, and creating public reports. Rezac is a graduate of the University of Denver (Ph.D., 2019).

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Neal Wilson, Ph.D. Dr. Wilson is a Research Associate at the Center for Economic Information, UMKC. His work considers public health in the Kansas City region, with a particular focus on pediatric lead poisoning and housing. Wilson received his Ph.D. (Economics) from the University of Missouri- Kansas City in 2021.

I. Executive Summary

A. Overview

According to the US Small Business Administration “2021 Small Business Profile”, Missouri has 542,519 small businesses (less than 500 employees) with 1.2 million employees (99.4 percent of Missouri businesses and 45.8 percent of Missouri employees)¹. Women own forty percent of businesses, while racial minorities own ten percent of businesses.

A disparity study examines whether there are differences between the percentage of dollars that minority- and woman-owned businesses received in contracts during a specific time, and the percentage of dollars that those businesses would be expected to receive based on their availability to perform those contracts. The study is necessitated in part by the 1989 U.S. Supreme Court’s decision in the case of *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989). The Court decision imposed legal requirements on jurisdictions to establish a “compelling interest” to support the establishment of a minority and woman business program. The results of this study will determine if a compelling interest exists for the continuation of the State’s M/WBE (Missouri Minority/Woman Business Enterprise) Program².

This Study evaluates procurement activity from Fiscal Year 2014 (July 1, 2014) through Fiscal Year 2021 (June 30, 2021). The data types we used include census data on minority and female business owner populations, agency contractual and purchasing procedural methods, contracts awarded, and qualitative data collected through focus groups, public hearings, telephone surveys of firms, online surveys, personal interviews and policy interviews.

The methodology for this study embodies the Constitutional principles of *City of Richmond v. Croson Co.* 488 U.S. 469 (1989), and best practices for designing race- and gender-conscious and small business contracting programs. The approach, developed by the National Academy of Sciences, has been specifically upheld by the Federal Courts and is now the recommended standard for designing legally defensible disparity studies³.

¹ U.S. Small Business Administration, Office of Advocacy 2021, 2021 Small Business Profile. Washington, DC. <https://cdn.advocacy.sba.gov/wp-content/uploads/2021/08/30144808/2021-Small-Business-Profiles-For-The-States.pdf>.

² A note on nomenclature: in the Study, Minority-owned Business Enterprises and Woman-owned Business Enterprises are referred to as M/WBEs when discussed collectively; this nomenclature does not indicate that these firms are both MBE and WBEs.

³ National Academies of Sciences, Engineering, and Medicine 2010, Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program. Washington, DC: The National Academies Press. <https://doi.org/10.17226/14346>.

This Study aims to address questions regarding the available opportunities in the State of Missouri for minority- and women-owned businesses in pursuit of contracts to conduct and contribute to projects across State agencies. This Study also addresses the utilization of available minority- and women-owned businesses to fulfill these contracts, the processes within the State agencies to maintain knowledge of the opportunities offered and provided to these small businesses, and the perception of these processes as seen by potential and actual vendors. Overall, this Study aims to provide a comprehensive evaluation of the above-stated aspects of contract opportunities for the State of Missouri for minority- and woman-owned small businesses, and to provide recommendations regarding process improvements.

B. Objectives

The Study addresses the following questions:

1. What are the legal standards governing contracting affirmative action programs?
2. What are the empirically-based geographic and procurement markets from which the State procures goods and services?
3. What has been Missouri's utilization of M/WBEs as prime contractors and subcontractors compared to non-M/WBE firms as prime contractors and subcontractors? In what 6-digit North American Industry Classification ("NAICS") codes do firms operate?
4. What is the availability of M/WBEs compared to non-M/WBE-owned firms in the State's markets?
5. Are there differences between the availability of M/WBEs and their utilization on State contracts? Do any disparities vary based on race, ethnicity or gender, or industry? Are there opportunities for increased contracts for M/WBEs?
6. What is the experience of M/WBEs compared to non-M/WBE firms in the State's markets throughout the wider economy, and how are actions regarding diversity goals employed? Are there differences in the opportunities across groups regarding gender, race, ethnicity, contract value, etc.?
7. What have been the actual experiences of minorities and women in seeking prime contracts and subcontracts in the State's markets? What barriers have they encountered, if any, based on race or gender?
8. What are the elements of the State's M/WBE Program? How is the program administered?
9. What has been the experience of M/WBEs and non-M/WBEs in seeking State work? What has been the effect of the M/WBE program? What race- and gender-neutral or small business measures have been helpful? What program aspects could be improved?
10. Based on the Study's results, what adjustments are appropriate and legally supportable? What measures could be implemented to enhance the program and support inclusion?

To address these questions, quantitative and qualitative evidence was examined. The Team determined whether there is a difference between the availability of M/WBEs in the State's markets, and the utilization of these firms, both in the State's own contracting and throughout the wider economy.

Qualitative data was gathered on M/WBEs through focus groups and interviews with business owners as well as interviews with State Agency staff. The Office of Administration's M/WBE Program and race- and gender-neutral policies and procedures were evaluated for their effectiveness and conformance with Constitutional parameters and national standards for M/WBE initiatives.

Based on the results of these analyses, we make recommendations regarding practices for successful contract procurement of potential M/WBE firms.

C. Findings in Brief

The State of Missouri has engaged in programmatic efforts to increase supplier diversity, led by the Office of Equal Opportunity, Office of Administration. For the study period of FY 2014 – FY 2021, this report indicates that while there has been a substantive impact on the participation of M/WBEs, there remains several industries where that impact falls short of State goals. Here are the findings in brief:

- The Analysis of Legal Standards indicates that courts have consistently used a strict scrutiny rationale for governments that institute affirmative action programs to increase supplier diversity of MBEs. Any program must be well situated in empirical research that proves a disparity exists and narrowly tailor government programs to address previous patterns of disparity. There is caution to only focusing on universal targets for supplier diversity, with a the standard of narrow tailoring leading to specific programmatic inputs where empirically-determined disparity exist.
- The Availability Analysis drew from regional and national directories of M/WBE firms predominantly in Missouri, Illinois, and Kansas in order to determine those firms available and able to bid on and receive State contracts. A custom census of identified firms was conducted to verify their M/WBE status and industry classification, allowing subsequent statistical analyses of disparity to be adjusted given this verification check.
- The Utilization Analysis identifies several key patterns in how State of Missouri contracts were allocated to M/WBEs. The relevant Product Market and Geographic Market were determined as frames for the analysis.
- For Chapter 34 contracts, it was found that:
 - Overall, 4.9% of spending on services went to MBEs and 3.8% to WBEs.
 - 16.5% of commodities went to MBE contractors and 0.74% to WBE

- contractors (Table 16). There must be caution in looking at overall utilization without contextualization of availability of M/WBE.
- There is substantial variation in M/WBE utilization across industry; for example, Computer equipment has MBE utilization for 57.58% of all spending; Advertising Agencies have 53.57% WBE utilization (Table 15). These findings can indicate a need to narrowly tailor programs for particular commodities.
 - Disparity ratios, taking into account availability of M/WBEs, indicate that overall MBEs do not face statistically significant disparity. WBEs face substantive and significant disparity (Table 21). The overall ratios for all spending must be contextualized by industry/commodity given the standard of narrow tailoring.
 - Statistical analyses of earnings and business formation in Missouri almost universally indicate that minorities and women have significantly lower wages and form businesses at significantly lower rates (Tables 26 – 43).
 - For Chapter 8 contracts, it was found that:
 - 15.9% of contract dollars for Construction-related Services went to MBEs; 15.9% to WBEs. Likewise, 23% of contract dollars for Construction went to MBEs and 23% to WBEs (Table 55).
 - MBEs and WBEs largely received subcontracts as opposed to being prime contractors for construction and construction-related services (Tables 49-50).
 - Similar extreme variation occurs within industries: 100% of Power and Communication Line construction contract dollars went to MBEs, while 37.5% of Plumbing and HVAC contract dollars went to WBEs (Table 54).
 - Disparity ratios, taking into account availability of M/WBEs, indicate that overall MBEs and WBEs do not face statistically significant disparity (Table 59). The overall ratios for all spending must be contextualized by industry/commodity given the standard of narrow tailoring.
 - A review of Current and Past Procurement Practice (Section V) indicates significant variation in how State Agencies institute supplier diversity programs.
 - The Office of Equal Opportunity remains severely understaffed given its dual mandate of supplier diversity and workforce diversity.
 - The tracking and reporting of data around the M/WBE Program is incomplete, difficult, and highly divergent across agencies.
 - Qualitative evidence of race and gender barriers (Section VI) indicate that while those firms that have successfully bid on State opportunities are able to access programmatic supports (help with bids, identification of opportunities), those that have been unsuccessful feel that the complicated process systematically excludes them from procurement opportunities.

D. Study Methodology and Data

The Study utilizes research methodology cited as best-practice for Disparity Studies as outlined by the National Academy of Sciences (National Academy of Sciences, 2010). Quantitative and qualitative methods, inclusive of descriptive and inferential statistics, were employed to address the availability, utilization, and statistical disparity of M/WBEs.

Qualitative Analysis: Fuzzy Cognitive Mapping (FCM) was employed as a method to surface the lived experience of M/WBE contractors with the State of Missouri. FCM (Kosko, 1986) leverages a formal step-by-step process moving participants from general concepts to specific weighting of elements around their successes and challenges in engaging the State through the M/WBE Program. Participants completed a “concept map” individually that detailed barriers and facilitators to successfully completing a contract with the State of Missouri; all participation was recorded for subsequent checks on clarity and content. Maps were analyzed at the item level to create a codebook by three researchers. Then, each item was assigned a code from the codebook and reviewed again until all researchers agreed the assigned codes were correct. Next, the data was entered into a “square adjacency matrix” before entering all data into in an Excel-based program called FCMapper (Papageorgiou and Salmeron, 2013). This software allowed us to merge all codes to create a full matrix. The resulting analysis determined the most central or salient barriers and facilitators.

Participant recruitment was accomplished by advertising on the Office of Administrations Website and direct communication with organizations that support M/WBE businesses. We also used “snowball” recruitment whereby businesses that participated were asked to recommend other businesses that could be invited.

Availability Study: Directories of MBE/WBE/DBE firms were drawn from state, regional and national accreditors of M/WBE status. An Access Database was created to track firm status in directories, industry codes, and location information. Data was systematically cleaned for duplicative entries resulting in a single source of information on available M/WBE firms in the geographic area defined for this Study.

Utilization Study: Data was collected from the Office of Administration Purchasing for all Chpt. 34 purchases over \$50,000. Data from four Executive Agencies was provided for Chpt. 34 purchases under \$50,000. Additional agencies committed to submitting data but did not submit data to the Team after repeated contact attempts. The Team associated Industry Codes with each vendor in order to complete relevant data tables. Geographic analysis was conducted to create relevant market areas for analysis. Utilization Study data carpentry was completed using SPSS statistical software and R Studio, with subsequent analysis also leveraging these statistical platforms. Industry codes were

drawn from Dun & Bradstreet Hoovers database. Geographic mapping leveraged ArcGIS Pro.

Data was subsequently submitted by the Office of Administration, Facilities Management Design & Construction (FMDC) representing all Chpt. 8 purchases, inclusive of small purchases under \$50,000. The Team hand-coded a stratified random sample of these contracts for analysis using the same methodology as that for Chpt. 34 purchases described above.

Statistical Analysis of Disparity: The statistical analysis was conducted by examining contracts by industry code, geographical location, M/WBE classification, and in comparison, to the availability of M/WBE firms and contracts. Inferential analysis, using best practice as identified by the National Academy of Sciences, employed *R* Studio to generate ratios of disparity as well as inferential tests – *t*-tests - for significance in disparity.

Policy and Practice Review: Analysis is based on meetings with, and/or interviewing, staff from the Office of Equal Opportunity (OEO), Purchasing, Accounting, Information Technology Services Division, and Facilities Management, Design, Construction (FMDC), as well as research of data sources and State documents that include:

- State of Missouri Statutes (RSMo) Chapters 8 and 34
<https://revisor.mo.gov/main/OneChapter.aspx?chapter=8>
<https://revisor.mo.gov/main/OneChapter.aspx?chapter=34>
- Executive Orders 05-30, 10-24 and 15-06
https://www.sos.mo.gov/library/reference/orders/2005/eo05_030
https://www.sos.mo.gov/library/reference/orders/2010/eo10_024
<https://www.sos.mo.gov/library/reference/orders/2015/eo6>
- Code of State Regulations (1 CSR) 30-5, 40-1 and 10-17
<https://www.sos.mo.gov/cmsimages/adrules/csr/current/1csr/1c30-5.pdf>
<https://www.sos.mo.gov/cmsimages/adrules/csr/current/1csr/1c40-1.pdf>
<https://www.sos.mo.gov/cmsimages/adrules/csr/current/1csr/1c10-17.pdf>
- Office of Equal Opportunity (OEO) annual reports from 2015 to 2021
<https://o eo.mo.gov/annual-reports/>
- Department of Purchasing Procurement Manual issued January 25, 2021
- OEO Job descriptions
- OEO directory of certified firms as of March 2022
<https://apps1.mo.gov/MWBCertifiedFirms/>
- SAM II financial reports (State accounting system)
- The Missouri Budget Fiscal Year 2023
<https://oa.mo.gov/budget-planning/budget-information/2023-budget-information>

- Oversight Review Committee Report, 2014 Disparity Study, 1/27/2015
https://oa.mo.gov/sites/default/files/2014_Oversight_Review_Committee_Report.pdf⁴
- Results of FY2020 OEO M/WBE Utilization survey of Executive Departments

Legal Analysis: A legal analysis was conducted in light of *City of Richmond v. J.A. Croson, Co.* 488 U.S. 469 (1989), detailing judicial findings and controlling laws that provide the statutory framework for this Small Business Impact Study.

E. Recommendations Summary

A summary of the Recommendations developed in the Study are as follows:

1. Engage in Substantive Review to Narrowly Tailor M/WBE Program. While the statistical analysis of disparity indicates that there is not a significant disparity for Minority-owned Business Enterprises, the analysis of specific industries indicates a tremendous variation in M/WBE utilization. In particular, a small number of very large M/WBE contractors cloud utilization rates, raising the concern that the current utilization practice does not effectively grow small M/WBEs necessary to reach deeper into communities. **Recommendation:** Convene Statewide committee to narrowly tailor M/WBE program to particular industries with disparity, with focus on small- to mid-size M/WBE firms.
2. Development and Implementation of Data Governance Policy. The Small Business Impact Study indicates that the State faces fundamental challenges in how it tracks and uses data regarding MBE/WBE vendors. Agency staff are unable to develop common sets of facts at a granularity necessary for OEO staff to engage Agency leaders in driving commitment to minimum M/WBE participation goals. **Recommendation:** Develop a comprehensive data governance policy across State Agencies concerning common practice in data collection, distribution, and analysis.
3. Investment in Information Technology Infrastructure. The current Information Technology system used for tracking MBE/WBE purchasing was implemented in 1998, with a technical backbone that is even older. Agency staff have difficulty in pulling timely data from the system both due to a lack of staffing to interact with the system as well as a complex interface. The current system is slated for decommissioning with the advent of a new accounting system. **Recommendation:** Engage in substantial training for all procurement staff throughout State Agencies to routinely pull purchasing data to achieve a greater cadence of analysis. Create a data culture where all staff are empowered to see current data as compared to a current culture where access is highly compartmentalized.

⁴ Websites used in the Current and Past Procurement Practice Review were last referenced on June 3, 2022.

4. Improve Data Collection. The 2014 Study noted the following: “A critical element of this Study and a major challenge was data collection of full and complete prime contract and associated subcontractor records. Improved data gathering should be a major focus.” Many State Agencies did not provide data to the Team for analysis. **Recommendation:** Compel full State Agency participation in the regular reporting of purchasing data, inclusive of M/WBE participation; if necessary, develop formal policies or statutory frameworks to drive compliance.
5. Investment in Office of Equal Opportunity Staff. The Office of Equal Opportunity (OEO) has two major statutory roles: Workforce Diversity and Supplier Diversity. OEO is severely understaffed to achieve these two roles. **Recommendation:** Invest in fully staffing the current OEO positions currently left open. Create a formal position to drive data governance and performance management around the M/WBE Program; endow this position with substantial formal responsibility to drive the creation of an agile data culture in respect to M/WBE participation.
6. Expand outreach and development to M/WBE ecosystem. Supplier diversity is a core role of OEO, yet the results of the Utilization Study indicates that only 70.3% of State purchasing expenditures remaining with Missouri firms. This is a seven percent decline from the previous Disparity Study, conducted in 2014, when 77.1% of contract dollars were paid to Missouri firms. A robust network of Missouri MBE/WBE vendors is essential to having a sufficiently competent and competitive pool for future contract actions. **Recommendation:** Fill current OEO supplier diversity positions; deepen relationships with University of Missouri Extension as a means to enhance M/WBE availability across under-represented geographic markets.
7. Regional outreach. The dispersion of purchasing actions across Missouri is highly divergent, with the Northeast, Northwest, Southeast, and Southwest regions all have \$0 allocated to MBE firms. While there is robust MBE/WBE participation in St. Louis, Central region, and to a lesser extent Kansas City, the allocation is skewed to be a small number of large contracts. **Recommendation:** Develop formal partnerships with regional universities focused on entrepreneurship and small business development; embed new OEO staff in each region in these entrepreneurship centers.
8. Reporting beyond aggregate level; development of program success goals. Currently, Executive Agencies report to OEO aggregate levels of contracts with MBE and WBE vendors, both in dollar amounts and number of contracts. Greater granularity in the data being reported out can allow for program success goals. **Recommendation:** Develop a performance management culture around M/WBE participation through substantial training and empowerment of State Agency staff to continually engage in purchasing data review and analysis; empower OEO staff to drive this evolution through formal policy.

9. Reporting across agencies. Currently the accounting and purchasing data processes are highly siloed with each Agency retaining the ability to pull data only for their purchasing actions. There is great value in being able to easily share data across Agencies to foster a greater understanding of challenges and opportunities in securing M/WBE vendors. **Recommendation:** Require quarterly reporting in a standard data format at a greater granularity; quarterly reports to be distributed to all purchasing staff and executive leadership through all Executive Agencies.
10. Reporting at greater cadency. Developing a quicker cadence for data collection and dissemination would allow Agencies to correct the flow of actions throughout the fiscal year. This allows data to become a tool for dynamic performance management rather than summative performance evaluation. The greater cadence would necessitate a simplified means of pulling the data and reporting results in order to lessen the burden on Agency staff. **Recommendation:** Require quarterly reporting in standard data format at a greater granularity; quarterly reports to be distributed to all purchasing staff through all Executive Agencies.

II. Legal Standards for State Contracting Affirmative Action Programs

A. Introduction

In 1989 in the *City of Richmond v. J.A. Croson Co.*, the United States Supreme Court struck down the City of Richmond, Virginia’s Minority Business Enterprise Ordinance as violating the Equal Protection clause of the Fourteenth Amendment to the U.S. Constitution.⁵ In its decision, the Court for the first time applied a “strict scrutiny” standard for evaluating a facial challenge to the constitutionality of a government set-aside program.

As a result, the State of Missouri enacted into law Section 37.020 RSMo, subsection 2, which required a disparity study to determine if its affirmative action programs were supported by evidence as required by *Croson*. The State of Missouri obtained its first disparity study for fiscal years 1989-1994, and has continued to commission similar, updated studies thereafter.

As Courts and government agencies have interpreted the directives in *Croson*, an evolving body of case law has emerged that provides more clarity on the nature and quality of evidence required by a state in order to support (or to continue to support) government affirmative action programs. The purpose of this Analysis of Legal Requirements is to address and recommend resolution for the concerns expressed in *Croson*. To do so, this analysis will provide an overview of affirmative action in government contracting, the current legal framework for evaluating the constitutionality of those programs, the quality of evidence now needed to meet the *Croson* standard, and finally a summary of recent case law since the commissioning of the last disparity study.

B. Overview of Affirmative Action in Government Contracting

In recent decades, both the federal government and state governments have sought to root out policies and practices that perpetuate such unconstitutional injustices in procuring services from private business enterprises; yet, ironically, the same constitutional commands that forbid such policies and practices restrain efforts that themselves may very well violate the equal protection commands of the Constitution. The tension lies in the use of race- and gender-based preferences to overcome a history of discrimination based on those classifications. Avoiding discrimination on the basis of race, ethnicity, and gender may require granting preferences on those very bases at the expense of individuals of majority races and male gender.⁶ As Chief Justice Roberts recently proclaimed, “The

⁵ *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 493(1989)

⁶ *Croson*, 488 U.S. 469, 493(1989)

way to stop discrimination on the basis of race is to stop discriminating on the basis of race.”⁷

The difficulty, of course, is that refusing to use racial and gender preferences to correct the evils of the past or present is to freeze the status quo, which is itself rife with the effects and practices of the past and even the present. As federal and state governments struggle with this tension through affirmative action programs geared to giving opportunities to minority-owned business enterprises (MBE’s) and women-owned business enterprises (WBE’s), several principles have emerged from judicial opinions and statutory and regulatory constraints.

First and foremost is the principle that affirmative action efforts regarding “suspect classifications,” such as race and ethnicity, and “quasi-suspect classifications,” such as gender, must satisfy heightened levels of judicial scrutiny not normally applied to government action. Most government actions need pass only rational basis scrutiny by the court. In other words, government actions – whether executive or legislative – must be rationally related to the achievement of legitimate governmental ends. They must not be irrational, arbitrary, or capricious acts or acts outside the recognized constitutional powers of the federal or state governments. Thus, preferences for “non-suspect” groups such as persons with disabilities, veterans, etc., may be enacted with only the most minimal of legislative consideration and with no evidence of disparities required for their use.

Under the Fifth and Fourteenth Amendments to the Constitution, however, any governmental actions that are based upon racial or ethnicity classifications must be narrowly tailored to achieving a compelling governmental interest⁸; and any governmental action based upon gender classifications must be substantially related to achieving an important governmental interest.⁹ Whether the motivations of government actors are benign or beneficial is irrelevant because what one generation believes is beneficial may be, in fact, harmful to the very groups it sought to benefit because “beneficial actions” based on erroneous stereotypes often do more harm than good.¹⁰ Courts have come to recognize these realities and, consequently, view race and gender based governmental actions, no matter how well intended, with the highest level of scrutiny under the Equal Protection Clause.

⁷ *Parents Involved in Cmty. Sch. v. Seattle Sch. Dist. No. 1*, 551 U.S. 701, 748 (2007).

⁸ *See, e.g., Wynn v. Vilsack*, 545 F. Supp. 3d 1271, 1277 (M.D. Fla. 2021).

⁹ *See, e.g., Vitolo v. Guzman*, 999 F.3d 353, 364 (6th Cir. 2021).

¹⁰ *Crosby*, 488 U.S. at 493.

C. Framework for Legal Analysis of Government Affirmative Action Program

Two Types of Equal Protection Challenges

There are two ways in which a government affirmative action program may be challenged under the federal constitution. The first method is a facial challenge in which the program is challenged under the Equal Protection Clause of the Fourteenth Amendment on the program itself.¹¹ The second method is the “as applied” challenge, in which the program may be considered constitutional on its face, but not as it is applied in a particular situation.¹²

A facial challenge “ordinarily requires a plaintiff to show there is no set of circumstances under which the challenged statutes or regulations can operate constitutionally.”¹³

The Guiding Principles Set Forth in *City of Richmond v. J.A. Croson*

The body of case law that influences the constitutionality of public and private affirmative action programs derives from several different contexts, including higher education, employment, and contracting. The most directly applicable case in the government contracting context is *City of Richmond v. J.A. Croson*. *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989). In *Croson*, the Supreme Court rejected a 30 percent minority set aside for city construction contracts in Richmond. The City presented evidence of the small number of minority businesses relative to the general population, the small number of minority city contracts relative the number of minority businesses, and the low minority participation in training programs and unions.¹⁴

In holding the City’s program unconstitutional, the Supreme Court articulated several governing principles for evaluating the legality of affirmative action programs with race-based requirements.

First, the Court concluded that race-based programs must satisfy “strict scrutiny” review by the courts.¹⁵ In other words, the state must establish a compelling interest as justification for its use of race, and it must “narrowly tailor” its program to achieving that interest.¹⁶

Second, the appropriate compelling interest must be to remedy past discrimination by the agency itself, either actively or passively by allowing private contractors to engage in

¹¹ *United States v. Salerno*, 481 U.S. 745 (1987).

¹² *Western States Paving Co. v. Washington State Department of Transp.*, 407 F.3d 983 (9th Cir. 2005).

¹³ *Midwest Fence Corp. v. United States Dep’t of Transp.*, 840 F.3d. 932, 941 (7th Cir. 2016).

¹⁴ *Croson*, 488 US. At 498-499.

¹⁵ *Id.* at 493.

¹⁶ *Id.*

racial discrimination.¹⁷ The state may also refuse to award contracts to entities engaging in such discrimination. The state may not simply assume such discrimination occurred or is occurring but “must identify that discrimination, public or private, with some specificity before they may use race-conscious relief.”¹⁸

Third, the state must use an appropriate comparator pool to determine whether racial disparities in the relevant region exist.¹⁹ That pool must be those MBE’s that are qualified to perform the required task.²⁰ and available in the local industry.²¹

Fourth, the Court expressly rejected rigid quotas for minority participation.²² Fixed percentages for required MBE contracting are viewed as rigid quotas.²³

Finally, the Court required full consideration of race-neutral alternatives to race-based set-asides before the state could resort to using race as a factor in its awarding of contracts.²⁴ If simplifying bidding procedure, relaxing of bond requirements, and other race-neutral alternatives could open the market to businesses that had suffered the effects of discrimination, those approaches should be favored over race-based programs.²⁵

Racial classifications carry the danger that they are based upon ill-informed stereotypes and pure racial politics²⁶ and carry a stigmatic harm,²⁷ even when their use is ostensibly “benign.”²⁸ Illegitimate notions of racial inferiority can never justify the use of such classifications, and the federal courts will subject such uses to the most exacting scrutiny in order to “smoke out” those notions and block their use in decision making.²⁹

The Fourteenth Amendment provides that no “person” shall be denied the equal protection of the law.³⁰ The Fourteenth Amendment right to be free of unequal treatment by the government explicitly applies to individuals and is, therefore, a “personal right” that courts are obligated to protect.³¹ That guarantee of equal treatment by the

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ *Id.* at 507.

²⁰ *Id.* at 503.

²¹ *Id.*

²² *Id.* at 507.

²³ *Id.*

²⁴ *Id.*

²⁵ *Id.*

²⁶ *Id.* at 510.

²⁷ *Id.* at 493.

²⁸ *Id.* a

²⁹ *Id.* at 469.

³⁰ U.S. Const. amend. XIV (providing that “[n]o State shall . . . deny to any person within its jurisdiction the equal protection of the laws.”)

³¹ *Croson*, 488 U.S. at 493.

government “cannot mean one thing when applied to one individual and something else when applied to a person of another color.”³² When the government advantages one person or business on the basis of race, it necessarily disadvantages another person or business on the same basis. As a result, the government has invaded a person’s right to equal protection.

State affirmative action plans can survive only when their use of racial classifications is free of “unthinking stereotypes” and racial politics.³³ State employers, even when their intention is to aid minority-owned businesses for the best of reasons, must “act in accordance with a ‘core purpose of the Fourteenth Amendment’ which is to ‘do away with all governmentally imposed discriminations based on race.’”³⁴ “Simple legislative assurances of good intentions” cannot sustain a program that uses racial classifications to award contracts³⁵; rather the use of such classifications must be supported by evidence that they are necessary to remedy the ongoing effects of past or present discrimination by the state itself, one of the few interests recognized by the courts as compelling enough to justify the use of racial classifications. That interest supports their use because past violations of the Equal Protection Clause deserve to be remedied if the Clause is to have any real meaning, but the remedy must target wrongs perpetrated by the State, and injuries must be demonstrable for the specific persons or businesses that benefit from the programs.³⁶

Strict Scrutiny Applies to Race Conscious Programs

Race-conscious remedial programs must satisfy strict scrutiny.³⁷ To pass constitutional muster under the strict scrutiny standard, the government must meet the two-part test and show: (1) a compelling government interest; and (2) a narrowly tailored remedy.³⁸ Data showing substantial disparities in utilization of minority firms suggests that “public dollars are being poured into ‘a system of racial exclusion practiced by elements of the local construction industry.’”³⁹ The burden of justifying differential treatment is always on the government.⁴⁰ Although stringent, strict scrutiny is not fatal in fact.

³² *Id.* at 494.

³³ *Wygant*, 476 U.S. at 277.

³⁴ *Croson*, 488 U.S. at 510.

³⁵ *Wygant*, 476 U.S. at 277.

³⁶ *Innovative Polymer Techs., LLC v. Innovation Works, Inc.*, No. CV 17-1385, 2018 WL 1701335, at *7 (W.D. Pa. Apr. 6, 2018).

³⁷ *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200, 227 (1995).

³⁸ *Id.*; *Croson*, 488 U.S. at 493.

³⁹ *Associated Gen. Contractors of Am. v. California Dep’t of Transp.*, 713 F.3d 1187 (9th Cir. 2013)(“*Caltrans*”).

⁴⁰ *Id.*

The government has a compelling interest in “remedying the effects of past or present racial discrimination.”⁴¹

In determining whether a program is narrowly tailored, courts generally look at factors such as evidence of discrimination within the industry, limiting the program to those minority groups that have actually suffered discrimination, the necessity for the relief and the efficacy of alternative race-neutral remedies; the flexibility and duration of the relief, including the availability of waiver provision; the relationship of the numerical goals to the relevant labor or contracting market; and the impact of the relief on the rights of third parties.⁴²

Race-neutral programs that focus on social and economic disadvantage only are not subject to strict scrutiny.⁴³

Before using race-based criteria for hiring MBE’s, the state must exhaust race-neutral approaches to eliminating racial disparities. Importantly, however, even the insufficiency of race-neutral efforts to increase minority participation in state projects will not support a conclusion of racial discrimination without additional evidence of prior or ongoing discriminatory action by the state.⁴⁴ The state is certainly free to engage in race-neutral efforts to increase minority participation, but race-conscious efforts must be firmly tied to remedying the injuries inflicted by the state itself.⁴⁵

A mere awareness of disparate racial impact during the awarding of contracts is not in and of itself impermissible, however.⁴⁶ So long as actions that create such disparate impacts are “unaccompanied by a facial racial or a discriminatory purpose” the program will not be subject to heightened scrutiny.⁴⁷ When a racial classification is affirmatively used to award contracts, however, its use must be necessary to remedy or avoid state discrimination where the victims of such discrimination can “connect the dots between the alleged cause (their race) and the alleged effect (the discriminatory conduct).”⁴⁸ In other words, as explained above, the State may not assume, simply on the basis of their race, that minority businesses or persons have been affected by past or present discrimination. Instead, such discriminatory effects upon minority businesses benefited by the programs must be supported by “material facts, not mere conclusions.”⁴⁹

⁴¹ *Shaw v. Hunt*, 517 U.S. 899, 909 (1996).

⁴² *See Caltrans*, 713 F.3d at 1191; *Midwest Fence Corp.*, 840 F.3d at 942.

⁴³ *Rothe Development, Inc. v. United States Department of Defense*, 836 F.3d 57 (D.C. Cir. 2016).

⁴⁴ *Wynn*, 545 F. Supp. at 1277.

⁴⁵ *Id.* at 1277.)

⁴⁶ *Linda Constr. Inc. v. City of Chicago*, No. 15 C 8714, 2016 WL 4429893, at *2 (N.D. Ill. Aug. 22, 2016)

⁴⁷ *Id.* at *2.

⁴⁸ *Innovative Polymer Techs., LLC*, 2018 WL at *7.

⁴⁹ *Id.* at *7.

Gender-Conscious Programs Must Satisfy Intermediate Scrutiny

Gender-Conscious programs, such as programs that give preference to Women's Business enterprises are subject to a standard referred to as intermediate scrutiny.⁵⁰ This means that these programs must be "supported by an 'exceedingly persuasive justification' and substantially related to the achievement of that underlying objective."⁵¹ Intermediate scrutiny is satisfied by 'showing at least that the classification serves important governmental objectives and that the discriminatory means employed are substantially related to the achievement of those objectives.'⁵² The evidentiary standard adopted by most circuits is something less than a "strong basis in evidence."⁵³ The state must present "sufficient probative evidence."

Gender is considered a "quasi-suspect" classification because, while women have certainly suffered a long history of discrimination in this country, they are not a "discrete and insular minority" largely cut off from political power. The courts, therefore, apply "intermediate scrutiny," which demands that gender-based preferences are "substantially related to important governmental interests." The burden to justify those preferences "rests entirely on the state."⁵⁴ At the outset, plaintiffs challenging such preferences have no obligation to prove that the preferences fail intermediate scrutiny.⁵⁵ Only after the state offers credible evidence of the required justification, do the plaintiffs have a burden to prove that the state's justifications are a pretext for discriminating on the basis of gender.

The justifications for preferring or rejecting the bids of WBE's must be free of stereotypical notions of the proper roles and abilities of men and women; WBE's must be evaluated with the same standards used for male-owned businesses and male individuals. The state must engage in "good faith efforts" to hire WBE's.⁵⁶ As with MBE's, WBE's must have "actually suffer[ed] a disadvantage in a specific industry or field."⁵⁷ in the relevant geographical area. "Broad sociological propositions" will fare no better in justifying gender preferences than they will in justifying racial preferences.⁵⁸

When the state justifies its program as an attempt to remedy the state's own sex-discrimination, absent a showing of intentional discrimination against women by the

⁵⁰ *Western States*, 407 F. 3d. at 990 n. 6.

⁵¹ *Id.*

⁵² *H.B. Rowe Co., Inc. v. Tippet*, 615 F.3d 233 (4th Cir. 2010)(quoting *Hogan*, 458 U.S. at 724).

⁵³ *Id.* at 242.

⁵⁴ *Vitolo*, 999 F.3d at 365.

⁵⁵ *Id.*

⁵⁶ *Midwest Fence Corp.*, 840 F.3d 932 at (7th Cir. 2016) (citing 49 C.F.R. pt. 26 app. (referring to federal guidance concerning good-faith efforts)).

⁵⁷ *Vitolo*, 999 F.3d at 364.

⁵⁸ *Id.* at 364.

state, “a policy that discriminates on the basis of sex cannot serve a valid governmental objective,”⁵⁹ i.e., an important governmental interest. The state, however, need not demonstrate its own discrimination, active or passive, when it seeks to remedy private discrimination in relevant geographical limits. Rather, the “[g]overnment has the broad power to assure that physical differences between men and women are not translated into permanent handicaps, and that they do not serve as a subterfuge for those who would exclude women from participating fully in our economic system.”⁶⁰

Nevertheless, the state must tailor its gender-conscious measures to WBE’s that have actually suffered the effects of gender discrimination by the state or its contractors for the program to be “substantially related” to an important interest, no matter how benign the motivations behind the preference.⁶¹

The state must show a “manifest imbalance” in the presence of WBE’s in state contracting and may not pursue proportionality for its own sake. While the courts are more tolerant of over-inclusiveness in gender-preference programs, a program must “hew closely” to the state’s goal of “compensating women for disadvantages they have suffered,” even if they are not “drawn as precisely as they might have been.”⁶²

D. Evidence Needed to Meet the *Croson* Standard

Following the issuance of the general constitutionality standards announced in *Croson*, Courts have had numerous opportunities in subsequent cases to apply those standards to state and federal government contracting programs. As a result, a body of case law has developed that better defines, specifies, and provides practical examples of the type and quality of evidence that ought to exist to support such a program. The following summarizes this guidance.

As *Croson* requires, to justify a race-conscious measure, a state must identify past discrimination with “some specificity.”⁶³ There is no ‘precise mathematical formula to assess the quantum of evidence that rises to the *Croson* ‘strong basis in evidence’ benchmark.’⁶⁴ Rather, the sufficiency of evidence must be evaluated on a case-by-case basis.⁶⁵

⁵⁹ *Id.* at 364–65.

⁶⁰ *Meland v. Weber*, No. 2:19-CV-02288-JAM-AC, 2021 WL 6118651, at *6 (E.D. Cal. Dec. 27, 2021)

⁶¹ *Vitolo*, 999 F.3d at 364.

⁶² *Meland*, 2021 WL 6118651, at *6.

⁶³ *Croson*, 488 U.S. at 504.

⁶⁴ *B. Rowe Co., Inc. v. Tippet*, 615 F.3d 233 (4th Cir. 2010). (Citing *Rothe Deve. Corp. v. Dep’t of Def.*, 545 F.3d 1023, 1049 (D.C. Cir. 2008)(*Rothe II*) (quoting *W.H. Scott Constr. Co. v. City of Jackson*, 199 F.3d 206, 218 N. 11 (5th Cir. 1999)).

⁶⁵ *Id.*

Interpreting *Croson*, the United States Court of Appeals for the Ninth Circuit held that *Croson* does not require evidence of specific acts of deliberate discrimination.⁶⁶

A “significant statistical disparity” could be sufficient to justify race-conscious remedial programs. In these cases, courts consider statistical and anecdotal evidence to identify the existence of discrimination.⁶⁷ Accordingly, federal, state, and local governments or governmental agencies often commission disparity studies to support and guide their affirmative action programs. The disparity studies typically contain statistical evidence designed to compare availability of businesses within protected classifications to the actual utilization of those businesses in government contracting. According to the Court’s analysis in *Dynalantic*, following the Supreme Court’s decision in *Croson*, there have been hundreds of disparity studies placed before congress.⁶⁸

Anecdotal evidence alone is typically not sufficient to show past discrimination, but coupled with statistical evidence, anecdotal evidence will bolster the case. Courts hold that anecdotal evidence complements statistical evidence because of its ability to bring “the cold numbers convincingly to life.”⁶⁹ Anecdotal evidence typically includes interviews, surveys, and statements. The Fourth, Tenth, and Ninth Circuits have rejected the need to verify anecdotal evidence.⁷⁰

In evaluating the statistical and anecdotal evidence, the Court must make “[f]actual determinations about the accuracy and validity of [the government’s] evidentiary showing for its program.”⁷¹

In the disparity study, the government must make a statistical calculation of **availability** based upon a number of sources of data, such as census data, industry data, training data, and education information. But data alone is not enough to establish availability for this purpose. The government also must show that the available participants are eligible, capable, qualified, and have capacity to perform the work required of the contract.⁷² The Data must “test the hypothesis that ‘discrimination caused the low percentage’ of minorities in the relevant market.”⁷³

Courts caution against small sample sizes. *Associated Gen. Contractors of Am. v. City of Columbus*, 936 F. Supp. 1363 (S.D. Ohio 1996).

⁶⁶ *Dynalantic Corp. v. United States Dep’t of Defense*, 885 F.Supp. 23 237 (D.C. Cir. 2012).

⁶⁷ *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147, 1166 (10th Cir. 2000).

⁶⁸ 885 F. Supp. 2d at *265.

⁶⁹ *Caltrans*, 713 F.3d. at *1196 (citing *Int’l Bhd. of Teamsters v. United States*, 431 U.S. 324, 339 (1977)).

⁷⁰ *Caltrans*, 713 F. 3d at *1187 (citing *Concrete Works of Colo., Inc. v. City & Cnty. of Denver*, 321 F.3d 950, 989 (10th Cir. 2003)).

⁷¹ *Concrete Works of Colo., Inc. v. City and Cnty of Denver* (Concrete Works II), 36 Fed 1513, 1522 (10th Cir. 1994).

⁷² *Dynalantic*, 885 F. Supp. 2d at 266.

⁷³ *Id.*

Next, the government must compare the availability to actual **utilization**. If that comparison yields a product of 80 percent or more, the disparity is assumed to be the result of discrimination. This disparity is typically referred to as the “80 Percent” Rule or the “Four-Fifths” Test. A more robust method of determining adverse impact, however, is the use of the standard deviation of two test. Most courts now require testing for statistical significance by using a standard deviation of two test. Thus, a standard deviation between availability and utilization of two or more establishes that the disparity was more than likely caused by discrimination (also known as a z-test of independent proportions). This test translates the probability of a difference in selection rates. A result of two or more standard deviations demonstrates that the disparity in selection rates is likely to occur by chance less than five percent of the time.⁷⁴ An alternative to the z-test is the Fisher’s Exact Test. This is used when sample sizes are small. These tests are commonly used by affirmative action planners in the private sector as well, as well as by the Office of Federal Contractors Compliance Programs (“OFCCP”).

E. Recent Developments: What Type of Evidence Have Courts Sanctioned?

In *Associated General Contractors of America v. California Dep’t of Transp.*,⁷⁵ the United States Court of Appeals for the Ninth Circuit held that Caltrans’ Disadvantaged Business Enterprise⁷⁶ program survived strict scrutiny. The Court found that the program was narrowly tailored to those groups that actually suffered discrimination. The Court relied on Caltrans’ substantial statistical and anecdotal evidence provided a “strong basis in evidence of discrimination against the four named groups.”⁷⁷

The Court sanctioned the process of first gathering statistical evidence to establish the availability of qualified minorities and females, then comparing the availability to actual utilization. This comparison, referred to by the Court as a “disparity” index (or similarly referred to in other contexts as adverse impact or disparate impact), is considered to be more likely than not caused by discrimination if the index is below 80%. In the context of federal affirmative action plans, courts likewise use what is known as the 80% rule. In other words if the availability divided by utilization is less than 80%, an inference of discrimination exists.

⁷⁴ *Hazlewood School District v. United States*, 433 U.S. 299 (1977).

⁷⁵ 713 F.3d 1187 (9th Cir. 2013).

⁷⁶ The Disadvantaged Business Enterprise (DBE) program is associated with the U.S. Department of Transportation and agencies using U.S. DOT funds. The relationship to strict scrutiny is the same for DBE and M/WBE programs, although specific program requirements are different based on the specific narrow tailoring of each DBE or MBE program.

⁷⁷ *Id.* at 1190.

The Court recognized that to establish a reliable availability statistic, more than pulling census data then comparing availability to utilization is required.⁷⁸ In this case, the Court held that the state may adjust availability upward or downward for factors affecting availability of disadvantaged businesses. These adjustments on availability should be based on capacity to perform the work and controlling for previously administered affirmative action programs. *Id.*

In that case, a research firm gathered extensive statistical data, as well as reviewed public records, interviews, and assessments.⁷⁹ The firm then measured statistical availability against control groups. The firm gathered anecdotal evidence by conducting public hearings to receive comments; receiving letters from business owners and trade associations; and interviewing representatives of trade associations and industry firms.

In *Dynalantic Corporation v. United States Dep't of Defense*,⁸⁰ the United States Court of Appeals for the D.C. Circuit held that the Department of Defense's Section 8(a) program was constitutional on its face, but that its application to contracts in the military simulation and training industry did not survive strict scrutiny, and therefore the contractor prevailed on its as-applied constitutional challenge. The D.C. Circuit examined congressional testimony of quantitative and qualitative analyses of evidence of discrimination in the government contracting industry. The Court also looked at disparity studies done for various states and cities. However, the defendant did not present evidence of discrimination, either in the public or private sector, in the simulation and training industry.

In evaluating the quality of the evidence presented, the Court first considered how the disparity indices were calculated and applied the 80 percent rule.⁸¹ Next, the Court reviewed the method by which the studies calculated the availability and capacity of minority firms. The Court concluded that the studies supplied substantial evidence to support a compelling government interest as to a facial challenge of the program. But for the as-applied challenge, the Court relied on *Croson*'s directive that the government must provide evidence demonstrating that there were eligible minorities in the relevant market.⁸²

In *Vitolo v. Guzman*,⁸³ the United States Court of Appeals for the Sixth Circuit reversed the lower Court's denial of a preliminary injunction and held that the government's use of race and sex preferences in granting funding under the American Rescue Plan Act violated Plaintiff's constitutional rights. The American Rescue Plan Act provided limited

⁷⁸ *Id.* at 1196.

⁷⁹ *Id.* at *1192.

⁸⁰ 885 F.Supp. 2d 23 (D.C. Cir. 2012).

⁸¹ *Id.* at 267.

⁸² *Id.* at 281.

⁸³ 999 F.3d at 356-7.

coronavirus relief to small privately owned restaurants through grants administered by the Small Business Administration. The SBA “injected explicit racial and ethnic preferences into the priority process, with certain groups presumptively qualifying as socially disadvantaged.”⁸⁴ In *Vitolo*, the SBA did not identify specific incidents of discrimination, but rather relied only “generally on societal discrimination against minority business owners.”⁸⁵ The Court cautioned that

[W]hen the government promulgates race-based policies, it must operate with a scalpel. And its cuts must be informed by data that suggest intentional discrimination. The broad statistical disparities are not nearly enough.⁸⁶

The SBA replied upon statistical data showing that 32 percent of Hispanic-owned small businesses and 41% of black-owned small businesses have “gone under” during the pandemic, compared to only 22% of white-owned small businesses. But the Court characterized this evidence as “general society disparities”, and held that “there simply too many variables to support inferences of intentional discrimination.”⁸⁷

In *Midwest Fence Corp. v. United States Dep’t of Transp.*⁸⁸ the United States Court of Appeals for the Seventh Circuit held that that the federal and Illinois state Department of Transportation Disadvantaged Business Enterprise programs were narrowly tailored to achieve compelling interests. In doing so, the Seventh Circuit joined the Eighth, Ninth, and Tenth Circuits in finding that the federal DBE program is constitutional on its face.⁸⁹ The federal DBE program at issue dated back to 1983 and had been reauthorized in 2015. In reviewing data, testimony, and studies regarding highway construction in the United States, Congress determined that discrimination continued to ‘pose significant obstacles for minority- and women-owned businesses.’⁹⁰ In exchange for federal funding, the Illinois Department of Transportation implemented a DBE program in compliance with federal law.

The focus of the decision was not on whether a compelling interest was established, but whether the program itself was narrowly tailored. In doing so, the Court adopted the

⁸⁴ *Id.* at 357.

⁸⁵ *Id.* at 361.

⁸⁶ *Id.*

⁸⁷ *Id.* at 362. (Citing *Croson*); see also *Faust v. Vilsack*, 519 F. Supp. 3d 470 (E.D. Wisc. 2021)(granting a temporary restraining order enjoining racial classifications for loan forgiveness program for farmers and ranchers under the American Rescue Plan Act of 2021).

⁸⁸ 840 F.3d 932 (7th Cir. 2016),

⁸⁹ *Id.* at 942 (citing *Western States Paving*, 407 F.3d at 995; *Sherbrooke Turf*, 345 F.3d at 967-68; *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147, 1155 (10th Cir. 2000)).

⁹⁰ *Id.* at *936 (citing Moving Ahead for Progress in the 21st Century Act, Pub. L. No. 112-1141, § 1101(b)(1)(A), 126 Stat. 405, 415)).

factors used in *United States v. Paradise*⁹¹ (an employment case): (a) the necessity for the relief and the efficacy of alternative race-neutral remedies; (b) the flexibility and duration of the relief, including the availability of waiver provision; (c) the relationship of the numerical goals to the relevant labor or contracting market; and (d) the impact of the relief on the rights of third parties.⁹² The Court found that the goals were flexible, the program was limited in duration, waivers are available, and that the program features goals or good faith efforts.⁹³

In *Kossman Contr. v. City of Houston*, the Court evaluated an equal protection challenge to Houston's Minority and Women Owned Business Enterprise (MWBE) program, which had been in place in various iterations since 1984.⁹⁴ Notably, the Court found that the contractor's expert testimony would be excluded because of his failure to articulate a specific method and because he had no training in statistics or economics that would allow him to comment on the disparity study put forth by the City of Houston.⁹⁵ The Court adopted the Magistrate Judge's ruling that found that the program partially passed strict scrutiny, except with regard to Native-American-owned businesses. In finding insufficient evidence to establish a need for remedial action for businesses owned by Native Americans, the Court would not give weight to the data analyst's opinion that the utilization of Native American firm should be discounted because of the significant work of two Native-American owned firms.

As for the analysis of the remainder of the preferred categories, the City's data analyst relied on industry data from Dun & Bradstreet, which the Court recognized as "extremely reliable," "frequently used in disparity studies" and "consistently accepted by courts throughout the country."⁹⁶ In contrast, the Court held that bidding data is inherently problematic. *Id.*

In *Mountain West Holding Co., Inc. v. State of Montana*,⁹⁷ the United States Court of Appeals for the Ninth Circuit held that factual issues existed as to whether the state's racial classifications in its disadvantaged business enterprise program could be justified. The subcontractor argued that the state's disparity expert "relied on several questionable assumptions and an opaque methodology to conclude that professional service contracts were awarded on a discriminatory basis."⁹⁸ The Court provided the following examples of potentially problematic issues: (a) the study failed to ascertain whether lower-than-

⁹¹ 480 U.S. 149 (1987)

⁹² *Id.* at 942.

⁹³ *Id.*

⁹⁴ No. H-14-1203, 2016 WL 1104363 (S.D. Tex. Feb. 16, 2016), *adopted by Kossman Contr. Co. v. City of Houston*, No. H-14-1203, 2016 U.S. Dist. LEXIS 36758 (S.D. Tex. Mar. 22, 2016).

⁹⁵ *Id.* at *1.

⁹⁶ *Id.* at *3.

⁹⁷ 691 Fed. Appx. 326 (9th Cir. 2017).

⁹⁸ *Id.* at 330.

expected DBE participation was attributable to factors other than race or gender, such as the firm's size, age, geography, or other similar factors; (b) the expert did not explain how it selected its survey sample; (c) only a small amount of surveyed contractors responded to questions; (d) the expert relied on very small sample sizes but did no tests for statistical significance; (e) the expert incorrectly gave equal weight to professional service and construction contracts; and (f) the expert incorrectly compare the proportion of available subcontractors to the proportion of prime contract dollars awarded.⁹⁹

In *Staco Elec. Constr. Co. v. City of Kansas City*, the city allegedly allowed thirty to forty businesses to remain certified for its MBE/WBE program “who could not meet the personal net worth test for [small business status] and did not suffer from the effects of past discrimination.”¹⁰⁰ Of particular note, the city allowed owners who had accumulated too many personal assets to transfer assets to protected categories in order to qualify as small businesses under the program.¹⁰¹ The city “decided not to enforce the asset the personal net worth requirement when it first went into effect, and ultimately the City Council postponed the personal net worth requirement an additional year.”¹⁰² The District Court for the Western District of Missouri concluded that plaintiffs had standing to sue for their injuries because it was “reasonable to infer from these allegations that Defendants made these decisions because they wanted these businesses to remain certified even though they did not suffer from the effects of past discrimination.”¹⁰³ The result of the city's actions meant that MBE's were getting special treatment to stay in the program even though they no longer were affected by discrimination.¹⁰⁴ The court observed that the plaintiffs did not have to plead that they would have obtained the contracts but for the barrier of special consideration for MBE's/WBE's because “[t]he ‘injury in fact’ in an equal protection case of this variety is the *denial of equal treatment resulting from the imposition of the barrier, not the ultimate inability to obtain the benefit.*”¹⁰⁵

In *Mark One Electric Co., Inc. v. City of Kansas City*¹⁰⁶ the District Court granted the City's motion to dismiss a complaint that objected to the personal net worth restrictions in the City's affirmative action contracting program. On appeal of this decision, the United States Court of Appeals for the Eighth Circuit recently affirmed the lower Court's

⁹⁹*Id.*

¹⁰⁰ *Staco Elec. Constr. Co. v. City of Kansas City, Missouri*, No. 4:20-CV-00165-DGK, 2021 WL 918764 (W.D. Mo. Mar. 10, 2021)

¹⁰¹ *Id.* at *8.

¹⁰² *Id.*

¹⁰³ *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ *Id.* at *9 (emphasis supplied).

¹⁰⁶ 2021 WL 83463 (W.D. Mo. Jan. 11, 2021),

decision, holding that the Program’s “personal net worth limitation is a valid narrow tailoring measure.”¹⁰⁷

F. Conclusion of Legal Standards

Croson and its progeny make it clear that government-sponsored affirmative action or set-aside programs will only be considered constitutional if they survive the highest level of constitutional scrutiny: Strict Scrutiny. In order to pass a strict scrutiny analysis, the state must show a compelling government interest and the program must be narrowly tailored.

This analysis focuses on how Courts have applied these principles since the *Croson* decision, focusing in particular on recent case law since the last disparity study commissioned by the State of Missouri. This analysis provides concrete examples of the particular types of evidence that courts have found will pass constitutional muster, as well as examples where the quality of evidence in a disparity study would not. This analysis, therefore, provides the most up-to-date framework for predicting the legal viability of the current disparity study set forth in this report.

¹⁰⁷ *Mark One Electric Co., Inc. v. City of Kansas City, Missouri*, 2022 WL 3350525 (8th Cir. Aug. 15, 2022).

III. Availability, Utilization and Disparities for the State of Missouri

A. The Availability Analysis

The Team constructed a unified directory of available M/WBEs in the defined geographic market through the collection, cleaning, and unification of eleven M/WBE directories kept by regional units of government or accreditors of M/WBE status:

- The Office of Equal Opportunity
- Missouri Department of Transportation
- Missouri Department of Economic Development
- Kansas City Area Transportation Authority
- Kansas City – Civil Rights and Equal Opportunity
- St. Louis Lambert Airport
- City of St. Louis
- St. Louis County
- Women Business Enterprise National Council – Women Business Development Center
- Mountain Plains Minority Supplier Development Council
- National Minority Supplier Development Council

The eleven (11) directories possess information related to the availability study and include relevant data for further analysis. For example, data extracted from directories included variables like geographic location of organizations, types of certifications received, types of NAICS codes assigned to an organization, names of organizations and their owners, and dates when certifications were obtained. Given that each directory used a different data structure, the Team created a unified data structure in order to assure comparability across all datasets. Challenges included the rigid designs of available datasets, a lack of ability to extract datasets by selected variables, the inability to identify unique variables, ultimately necessitating a new data structure that would retain all relevant elements from each directory. The unified directory was created from relational formats (such as Excel file formats), text files, reports, and portable document formats.

Since certain datasets only collected a handful of variables needed for the Availability Study section of the report, each extracted dataset was studied for a defined set of variables needed to create a unique dataset, which was independent from its extracted predecessors, yet structured to accurately merge variables across datasets with further elimination of any duplicates. For example, the created unique dataset consisted of 38 variables and consisted of observations extracted from available directories. This means that every extracted dataset, from the eleven directories, was reviewed for the content of the 38 variables, cleaned for data accuracy, extracted in a standardized form for dataset consistency, and later thoroughly reviewed for duplicates. This data wrangling process not only allowed for the creation of an organized dataset, but also provided flexibility to

the dataset, and an opportunity to keep track of observations that appeared in multiple datasets across the eleven directories. To put this into a perspective, a total of 4,934 records were reviewed and condensed to create a dataset with 2,848 unique records. In other words, 2,086 out of 4,934 records were either records containing duplicate information, or certain records contained missing information not available from the original directory.

The availability section of the report required collection of capable MBEs and WBEs by each of the classification from the eleven directories that possessed, in various forms and formats, datasets required for further availability analyses. Many directories from the specified list indeed maintained their own database system, which allowed for successful extraction of information related to MBE and WBE businesses. However, multiple directories either lacked extractable information, accrediting organizations refused to provide any type of data, or simply ignored our requests to obtain desired datasets.

Out of eleven directories, four directories did not provide extractable data for further analysis. The Missouri Department of Economic Development, National Minority Supplier Development Council, Mountain Plains Minority Supplier Development Council, and Women Business Enterprise National Council – Women Business Development Center are not set up to provide extractable data for an independent reviewer. All four organizations were contacted either by phone or email to obtain data required for the availability study, yet no further comments or answers were received. For example, the initial contact made with the Women Business Enterprise National Council – Women Business Development Center yielded no results as their data privacy policies prevented the organization from sharing any and all datasets. It was suggested to contact satellite offices in Kansas City, St. Louis, and Chicago for further clarification to obtain desired datasets. Our office made several attempts to contact the Kansas City Office and St. Louis Office with no further responds from either office.

Additionally, several attempts were made to contact representatives from Mountain Plains Minority Supplier Development Council and National Minority Supplier Development Council. The satellite office for Mountain Plains Minority Supplier Development Council in Kansas City only provided an office phone number with no access to the local staff directory. Multiple calls yielded no further response. The National Minority Supplier Development Council specified two separate satellite offices for Western and Eastern Missouri and only provided generic contact emails (certification@mpmsdc.org, certification@midstatesmsdc.org). Both emails were contacted several times with no further response to obtain desired datasets.

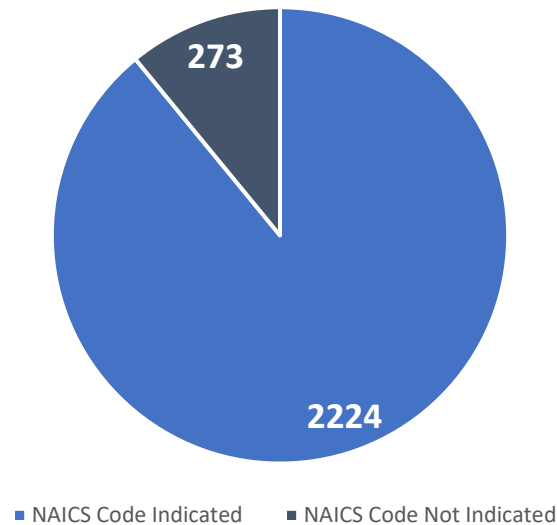
Further work with specified directories yielded challenges when it came to extraction of availability datasets. Three directories from the above list share a database system. St. Louis Lambert Airport, City of St. Louis, and St. Louis County are three (3) directories that rely on data from St. Louis Lambert Airport. Therefore, the data for the availability

section from the mentioned three directories was extracted from St. Louis Lambert Airport. The dataset from the Office of Equal Opportunity (OEO) was successfully extracted, yet the OEO uses the UNSPSC classification system for MBEs and WBEs. Since there are no usable and reliable code crosswalks between UNSPSC and NAICS coding system, missing data from the extracted OEO dataset was matched with available data from other datasets. The Kansas City Area Transportation Authority (KCATA) does not maintain a database, however the KCATA references two websites from which this data can be obtained: the Kansas Department of Transportation and the Missouri Regional Certification Committee. Data was extracted from both sources.

To preserve data accuracy and account for missing information that was partially provided by the original eleven directories, additional directories were researched. Overall, five additional directories were examined for further data extraction. Yet, out of five additional directories only one directory produced desired data. The Kansas Department of Commerce maintains its own database, from which MBE and WBE datasets for Kansas and Missouri were extracted. The Bi-State Development directory references the Missouri Regional Certification Committee (MRCC), which was previously already extracted. The Kansas City – Human Relations Department references the Kansas City Civil Rights and Equal Opportunity database, which was also previously extracted. The St. Louis Minority Business Council and the Mid-States Minority Supplier Development Council refused to provide any datasets with reference to data privacy policies.

After individual directory files were cleaned, formatted, and organized, they were combined into a singular file containing unique records. The original file contained 2,848 records/organizations that fall under the classification of DBE, MBE, or WBE. Yet, further analysis revealed that many records were outside the geographic scope of the availability study. To reflect organizations that belong to the Missouri state and Kansas City Metropolitan Area, the file was further edited and organized. The file representing the proper geographical scope of the study contains a total of 2,497 records. It must be noted that 273 records are missing NAICS codes. Missing NAICS codes within a file is not due to organizational error, nor is it due to human error during the cleaning process but is rather due to the design of the database from which the data was collected. As was mentioned earlier, several directories maintain databases using vastly different techniques, which contributes to information loss and contributes to the inability to extract all necessary variables. Figure 1 indicates that just over 12% of organizations in the unified database did not have NAICS codes.

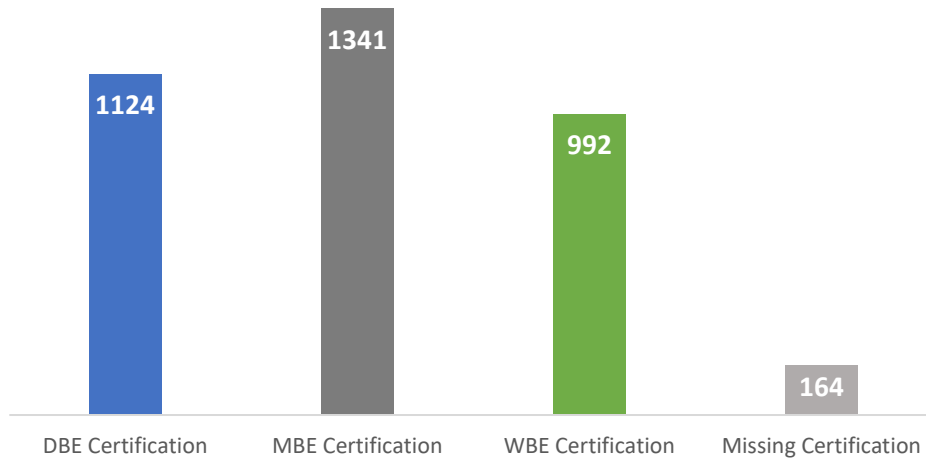
Figure 1: Organizations and NAICS Codes



The records differentiate between types of certifications. There are three types of certifications obtained by organizations: DBE¹⁰⁸, MBE, and WBE. Overall, there are 1,124 organizations with DBE certification, 1,341 organizations with MBE certification, and 1,471 organizations with WBE certification. However, an organization can obtain several types of certifications at once, meaning the numbers presented above is not a representation of unique values but is rather a cumulative representation of several organizations per certification type. For example, if an organization is allowed to obtain MBE, WBE, and DBE certifications, in that case, an organization will be reflected in all three types of certifications (Figure 2).

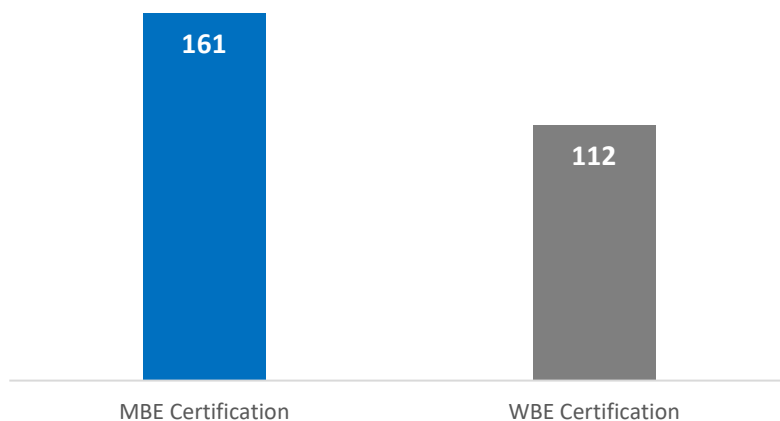
¹⁰⁸ Note that while the Team only used firms explicitly identified as MBE or WBE for further statistical analysis, no firms were dropped from the data for also being identified as a DBE.

Figure 2: Certifications by Type



Out of 273 organizations with missing NAICS codes, 161 organizations have MBE certification, and 201 organizations have WBE certification. Once again, several organizations may hold both types of certifications, despite missing NAICS codes (Figure 3).

Figure 3: Number of M/WBE Organizations Without NAICS Codes



Further analysis of data revealed that there are 658 organizations in the construction sector, 492 organizations in construction-related services, 27 organizations in the information technology sector, 168 in the goods sector, and 457 organizations in the

services sector (Table 1). It appears that the construction sector is the leading sector among organizations with DBE¹⁰⁹, MBE, and WBE certifications, while the information technology sector is the least.

Table 1: Number of Firms in Four Focal Classification Categories

Sector	2-Digit NAICS Codes	Number of Organizations
Construction	23	658
Construction-related Services	54	492
Goods	31, 42, 44	168
Services	48, 52, 53, 56, 61, 62, 71, 72, 81	457
Information Technology	51	27

B. Utilization Analysis for Chapter 34 Contracts

Contract Data Sources and Sampling Method

The Study analyzed Chapter 34 contract data for fiscal years 2014 through 2021 for the State of Missouri. The Office of Administration Purchasing provided data for contracts exceeding \$50,000. Individual agencies were contacted for any data regarding contracts below \$50,000.

Data Sources and Sampling Method

Our Study analyzed contract data for fiscal years 2014 through 2021. The initial contract file included yearly contract files from the Office of Administration, which contained information about the purchasing of several state agencies. Unless otherwise specified, all analysis refers to the time period FY2014-FY2021.

In total we received records for 24,049 contract disbursements, of these 12,421 were associated with an amount of \$0. Zero-dollar contracts represent open contracts for goods and services; these contracts were not included in the analysis until there were funds obligated against them. The recipients of the remaining contracts (5,709 of which were for \$50,000 or less) were queried in the Dun & Bradstreet Hoover's Database for a corresponding NAICS code. Not all contract disbursements were associated with a

¹⁰⁹ As noted previously, DBE firms were retained in the Availability Analysis, but subsequent statistical analysis only references those firms identified as MBE or WBE.

NAICS code. No contracts were excluded from the determination of Missouri's industry and product market for lack of a NAICS code. This created the Final Contract File of 11,537 contract disbursements corresponding to \$6,606,941,817. The Final Contract File was used to identify the product markets and geographic market area for the Study, to estimate the utilization rates of M/WBE enterprises, and to calculate the availability of M/WBEs in the state's marketplace. Throughout our analysis we utilize an MBE and WBE nomenclature which reflects the system used by the state of Missouri. MBE status indicates a minority-owned business. WBE status is drawn to exclude any of the enterprises accounted for via MBE, meaning a firm is classified exclusively either as an MBE or WBE.

Utilization Analysis

We reorganized the Final Contract File at the 2-digit NAICS Code level to analyze state utilization according to four classification categories (goods/supplies, services, construction, construction-related services, see Table 2). The schema provided in Table 2 is informed by the US Bureau of Labor Statistics and provides a template for our attribution practices.¹¹⁰ Those enterprises with a 2-digit NAICS code of 99 and those we were not able to identify a NAICS code are grouped together as "Non-classified Establishments."

Table 2: Two-Digit NAICS Code by Sector

Commodity Classifications	NAICS Codes
Construction	23
Services	44 - 93
Construction-Related Services	21, 541330, 541990, 811310
Goods, Supplies, Commodities	11, 31-33, 42, 44
Non-classified Establishments	99, and non-classified establishments

Table 3 describes the number of contracts and the dollar amount spent in each classification category. It also describes the percentage of total spending by classification category. The preponderance of spending and number of businesses are associated with the services category. Although it comprises nearly 20% of total contracts the non-classified establishments account for only 7.2% of total spending.

¹¹⁰ https://www.bls.gov/iag/tgs/iag_index_naics.htm

Table 3: Contracts by Classification

Classification Category	Count	Amount Spent	Percent Spent
Services	5221	\$4,752,840,238	71.9%
Goods, Supplies, Commodities	3731	\$1,324,234,519	20.0%
Construction-Related Services	215	\$43,655,419	0.7%
Construction	174	\$11,722,059	0.2%
Non-classified Establishments	2196	\$474,489,582	7.2%

Source: Analysis of Missouri Agency Data; Hoovers

Table 4 reports utilization of MBE and WBE by classification category as a raw count of enterprises and as a sum disbursed to those enterprises. Contrasting row one with row five we observe a relatively large number of firms grouped as non-classifiable is associated with the relatively small amount of contract dollars.

Table 4: MBE and WBE by Classification Category

Classification Category	MBE Count	WBE Count	MBE Dollar Value of Contracts	WBE Dollar Value of Contracts
Services	123	150	\$77,247,725	\$63,690,759
Goods, Supplies, Commodities	117	59	\$437,299,401	\$8,912,990
Construction-Related Services	8	2	\$251,769	\$31,044
Construction	3	0	\$22,700	\$0
Non-classified Establishments	73	11	\$7,232,996	\$295,482

Source: Analysis of Missouri Agency Data; Hoovers

Table 5 looks at MBE and WBE utilization in percentage terms. This table reports the percentage of enterprises associated by classification category that are identified as MBE or WBE. It also reports the percentage of total spending associated with a classification category that is associated with an MBE or a WBE. Note a large percentage of Goods, Supplies, and Commodities (33%) is associated with MBE, this is a significant outlier in the data.

Table 5: MBE and WBE Percentage Utilization

Classification Category	Percent MBE	Percent WBE	MBE Percent of Total Contract Dollars	WBE Percent of Total Contract Dollars
Services	2.4%	2.90%	1.6%	1.30%
Goods, Supplies, Commodities	3.1%	1.60%	33.0%	0.70%
Construction-Related Services	3.7%	0.90%	0.6%	0.10%
Construction	1.7%	0.00%	0.2%	0.00%
Non-classified Establishments	3.3%	0.50%	1.5%	0.10%

Source: Analysis of Missouri Agency Data; Hoovers

Table 6 provides counts for the number of prime state contractors that subcontracted with an MBE or WBE. Note the lack of awarded subcontracts associated with the construction and construction-related services categories is reflective of Chapter 8 contracts being analyzed separately in this report.

Table 6: Count of Prime Contracts with MBE or WBE Subcontractors

Classification Category	Contracts w/ MBE Subcontract Awards	Contracts w/ WBE Subcontract Awards	Dollar Value of MBE Subcontracts	Dollar Value of WBE Subcontracts
Services	363	129	NA	NA
Goods, Supplies, Commodities	61	18	NA	NA
Construction Related Services	23	20	NA	NA
Construction	0	0	NA	NA
Non-classified Establishments	66	41	NA	NA

Source: Analysis of Missouri Agency Data; Hoovers

Table 7 provides percentages for the number of prime state contractors with MBE or WBE subcontractors.

Table 7: Percentage of Prime Contracts with MBE or WBE Subcontractors

Classification Category	% Contracts w/ MBE Subcontract Awards	% Contracts w/ WBE Subcontract Awards	% Total Dollar Value of MBE Subcontracts	% Total Dollar Value of WBE Subcontracts
Services	6.95%	2.47%	NA	NA
Goods, Supplies, Commodities	1.63%	0.48%	NA	NA
Construction Related Services	10.70%	9.30%	NA	NA
Construction	0.00%	0.00%	NA	NA
Non-classified Establishments	3.01%	1.87%	NA	NA

Source: Analysis of Missouri Agency Data; Hoovers

Table 8 reports the number of prime contracts awarded to minority-owned businesses and woman-owned businesses.

Table 8: Prime Contracts to MBE and WBE

Classification Category	MBE Contracts Awarded	WBE Contracts Awarded
Services	47	54
Goods, Supplies, Commodities	23	23
Construction Related Services	3	1
Construction	2	0
Non-classified Establishments	31	5

Source: Analysis of Missouri Agency Data; Hoovers

We have compiled a list of those minority and woman owned enterprises identified by name and receiving State contract dollars in the Final Contract File. The list includes the number of contracts associated with each enterprise and the dollar amount awarded to each enterprise. The list is provided in Appendix A.

State of Missouri's Product Market

The extent of Missouri's industry market must be determined empirically to be warranted. The requirement for this determination is that the product market capture the "vast bulk" of state spending. There is no clear numerical level which indicates what percentage accounts meets this requirement. A regular rule of thumb with regard to this spending is 75% of the prime contract and subcontract payments¹¹¹ for the study period on the basis of the 6-digit North American Industry Classification System (NAICS).¹¹² We take our analysis farther, focusing on the 40 NAICS codes that cover 83.7% of Final Contract File dollars disbursed. Table 9 presents the NAICS codes used to define the product market in terms of total contract dollars. Table 14 also contains a description of each NAICS code as well as the percentage of Final Contract File spending associated with each code, and then the cumulative percentage spent. This final column represents each additional amount of spending added to the total from the columns above and is particularly illustrative of the size of the first five industry classifications in the overall State of Missouri spending patterns for Chapter 34 contracts. The results of this table will be further subset to reflect the geographic market as described below.

Table 9: Percentage Distribution of Total Spending by NAICS Code

NAICS Code	Description of Code	% Spent	Cumulative % Spent
621900	Other Ambulatory Health Care Services	13.1%	13.1%
541512	Computer Systems Design Services	9.3%	22.4%
624110	Child and Youth Services	8.2%	30.6%
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	7.9%	38.5%
541219	Other Accounting Services	6.0%	44.6%
624190	Other Individual and Family Services	3.8%	48.3%
541513	Computer Facilities Management Services	3.7%	52.0%
524114	Direct Health and Medical Insurance Carriers	2.2%	54.3%
441110	New Car Dealers	2.0%	56.3%
518210	Data Processing, Hosting, and Related Services	2.0%	58.2%
999990	Non-classifiable Establishments	1.9%	60.1%
624310	Vocational Rehabilitation Services	1.6%	61.6%
541511	Custom Computer Programming Services	1.5%	63.2%
541720	Research and Development in the Social Sciences and Humanities	1.4%	64.6%

¹¹¹ https://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_644.pdf

¹¹² <https://www.bls.gov/bls/naics.htm>

541810	Advertising Agencies	1.4%	66.0%
522110	Commercial Banking	1.3%	67.3%
424410	General Line Grocery Merchant Wholesalers	1.3%	68.6%
443142	Electronics Stores	1.3%	70.0%
541611	Administrative Management and General Management Consulting Services	1.3%	71.3%
621420	Outpatient Mental Health and Substance Abuse Centers	1.1%	72.4%
621111	Offices of Physicians (except Mental Health Specialists)	0.9%	73.3%
622210	Psychiatric and Substance Abuse Hospitals	0.8%	74.1%
485410	School and Employee Bus Transportation	0.8%	74.9%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	0.8%	75.8%
519190	All Other Information Services	0.8%	76.5%
624410	Child Day Care Services	0.6%	77.1%
541330	Engineering Services	0.6%	77.7%
813319	Other Social Advocacy Organizations	0.6%	78.3%
522298	All Other Non-Depository Credit Intermediation	0.6%	78.8%
446110	Pharmacies and Drug Stores	0.6%	79.4%
423830	Industrial Machinery and Equipment Merchant Wholesalers	0.5%	79.9%
334111	Electronic Computer Manufacturing	0.5%	80.4%
511210	Software Publishers	0.5%	80.9%
541612	Human Resources Consulting Services	0.5%	81.4%
611699	All Other Miscellaneous Schools and Instruction	0.4%	81.8%
611710	Educational Support Services	0.4%	82.2%
541211	Offices of Certified Public Accountants	0.4%	82.6%
541110	Offices of Lawyers	0.4%	83.0%
541690	Other Scientific and Technical Consulting Services	0.4%	83.3%
541618	Other Management Consulting Services	0.4%	83.7%

Source: Analysis of Missouri Agency Data

Tables 10 and 11 describe the percentage of State spending for two tranches of contracts. Each of these tables reports the top 40 NAICS codes associated with a different size of contract. The first tranche, detailed in Table 10, contains all contracts listed as above \$50,000. This group serves as a proxy for the distribution of spending among prime contracts. The second tranche of contracts, detailed in Table 11, contains all contracts listed as \$50,000 and below. The second group serves as a proxy for subcontract

spending. Note that cumulative percent spent in Table 15 totals 84.6% of contact spending over \$50,000 while cumulative percent spent in Table 16 totals only 42.8% of under \$50,000 contract spending. This analysis is of contracts provided by the Office of Administration/Purchasing and represent best practices in tracking across multiple databases with routine data examination to influence management decisions.

Table 10: Contracts Valued Over \$50,000

NAICS			
Code	Description of Code	% Spent	Cumulative % Spent
621900	Other Ambulatory Health Care Services	13.3%	13.3%
541512	Computer Systems Design Services	9.4%	22.7%
624110	Child and Youth Services	8.3%	31.1%
	Computer and Computer Peripheral Equipment and Software Merchant		
423430	Wholesalers	8.0%	39.1%
541219	Other Accounting Services	6.1%	45.2%
624190	Other Individual and Family Services	3.8%	49.0%
541513	Computer Facilities Management Services	3.7%	52.7%
	Direct Health and Medical Insurance		
524114	Carriers	2.3%	55.0%
441110	New Car Dealers	2.0%	57.0%
	Data Processing, Hosting, and Related		
518210	Services	2.0%	59.0%
999990	Nonclassifiable Establishments	1.8%	60.9%
624310	Vocational Rehabilitation Services	1.6%	62.4%
541511	Custom Computer Programming Services	1.5%	64.0%
541810	Advertising Agencies	1.4%	65.4%
	Research and Development in the Social		
541720	Sciences and Humanities	1.4%	66.8%
522110	Commercial Banking	1.3%	68.2%
443142	Electronics Stores	1.3%	69.5%
	Administrative Management and General		
541611	Management Consulting Services	1.3%	70.8%
	General Line Grocery Merchant		
424410	Wholesalers	1.3%	72.1%
	Outpatient Mental Health and Substance		
621420	Abuse Centers	1.1%	73.3%
	Offices of Physicians (except Mental		
621111	Health Specialists)	0.9%	74.2%
	Psychiatric and Substance Abuse		
622210	Hospitals	0.8%	75.0%
485410	School and Employee Bus Transportation	0.8%	75.8%

	Drugs and Druggists' Sundries Merchant		
424210	Wholesalers	0.8%	76.6%
519190	All Other Information Services	0.8%	77.4%
624410	Child Day Care Services	0.6%	78.0%
541330	Engineering Services	0.6%	78.6%
	All Other Nondepository Credit		
522298	Intermediation	0.6%	79.2%
813319	Other Social Advocacy Organizations	0.6%	79.7%
446110	Pharmacies and Drug Stores	0.6%	80.3%
	Industrial Machinery and Equipment		
423830	Merchant Wholesalers	0.5%	80.8%
334111	Electronic Computer Manufacturing	0.5%	81.3%
541612	Human Resources Consulting Services	0.5%	81.8%
511210	Software Publishers	0.5%	82.3%
	All Other Miscellaneous Schools and		
611699	Instruction	0.4%	82.7%
611710	Educational Support Services	0.4%	83.1%
541110	Offices of Lawyers	0.4%	83.5%
541211	Offices of Certified Public Accountants	0.4%	83.9%
541618	Other Management Consulting Services	0.4%	84.2%
	Other Scientific and Technical Consulting		
541690	Services	0.4%	84.6%

Table 11: Contracts Valued under \$50,000¹¹³

NAICS or UNSPC			
Code	Description of Code	% Spent	Cumulative % Spent
999990	Nonclassifiable Establishments	3.3%	3.3%
624190	Other Individual and Family Services	3.0%	6.3%
424410	General Line Grocery Merchant Wholesalers	2.8%	9.1%
541511	Custom Computer Programming Services	2.2%	11.3%
	Service Establishment Equipment and		
423850	Supplies Merchant Wholesalers	1.6%	12.9%
	Industrial Machinery and Equipment		
423830	Merchant Wholesalers	1.5%	14.4%
423420	Office Equipment Merchant Wholesalers	1.4%	15.8%
541211	Offices of Certified Public Accountants	1.3%	17.1%
622110	General Medical and Surgical Hospitals	1.3%	18.4%

¹¹³ The data used in Table 11 references purchases made by the Office of Administration, Purchasing division.

	Other Chemical and Allied Products		
424690	Merchant Wholesalers	1.2%	19.6%
	Colleges, Universities, and Professional		
611310	Schools	1.2%	20.8%
	Other Commercial and Service Industry		
333318	Machinery Manufacturing	1.2%	21.9%
	Medical, Dental, and Hospital Equipment		
423450	and Supplies Merchant Wholesalers	1.2%	23.1%
	Services for the Elderly and Persons with		
624120	Disabilities	1.1%	24.1%
	Administrative Management and General		
541611	Management Consulting Services	1.0%	25.2%
541512	Computer Systems Design Services	1.0%	26.2%
441110	New Car Dealers	0.9%	27.1%
813319	Other Social Advocacy Organizations	0.9%	28.0%
562211	Hazardous Waste Treatment and Disposal	0.9%	28.9%
624110	Child and Youth Services	0.9%	29.8%
	Plumbing, Heating, and Air-Conditioning		
238220	Contractors	0.9%	30.6%
	Other Grocery and Related Products		
424490	Merchant Wholesalers	0.8%	31.5%
	Crushed and Broken Limestone Mining and		
212312	Quarrying	0.8%	32.3%
562920	Materials Recovery Facilities	0.7%	33.1%
541330	Engineering Services	0.7%	33.8%
443142	Electronics Stores	0.7%	34.5%
561311	Employment Placement Agencies	0.7%	35.1%
	Commercial Printing (except Screen and		
323111	Books)	0.7%	35.8%
454390	Other Direct Selling Establishments	0.6%	36.4%
76111501	Building Cleaning Services	0.6%	37.0%
	Packaged Frozen Food Merchant		
424420	Wholesalers	0.6%	37.7%
541380	Testing Laboratories	0.6%	38.3%
	Other Miscellaneous Durable Goods		
423990	Merchant Wholesalers	0.6%	38.9%
511210	Software Publishers	0.6%	39.5%
	Other Scientific and Technical Consulting		
541690	Services	0.6%	40.0%
323117	Books Printing	0.6%	40.6%
325412	Pharmaceutical Preparation Manufacturing	0.6%	41.2%

561621	Security Systems Services (except Locksmiths)	0.6%	41.7%
441228	Motorcycle, ATV, and All Other Motor Vehicle Dealers	0.6%	42.3%
444120	Paint and Wallpaper Stores	0.5%	42.8%

Missouri's Geographic Market

It is a requirement for the State to limit their race- and gender-conscious contracting programs to its market area. It is not acceptable to assume the geographic market of the State is confined within the boundaries of the state. Confining the state's geographic market to the state's boundary ignores "economic reality". Missouri has two major cities, the metropolitan statistical area associated with each transcends state lines. Table 12 describes the distribution of Missouri State spending. This table illustrates that 60.1% of the state's identified product market spending takes place within the state of Missouri and the bi-state Metropolitan Areas of Kansas City and St. Louis. The Cumulative % column tallies Final Contract File Spending across all geographies. We take this MSA-augmented geography to be the relevant geographic market for the study.

Table 12: Distribution of Contract Spending by State

State Geography	Count	Total Spent	% Spent	Cumulative %
MO plus metro areas	2147	\$3,322,122,361	60.10%	60.1%
IL all other areas	315	\$876,079,917	15.80%	75.9%
TX	173	\$324,970,477	5.90%	81.8%
TN	14	\$160,939,909	2.90%	84.7%
CA	154	\$141,816,319	2.60%	87.3%
All Others	1065	\$702,752,096	12.71%	100.0%

Source: Analysis of Missouri agency data.

Table 13 describes the spending of the State of Missouri in its geographic market, disaggregated by region. Note the preponderance of spending in the St. Louis and Central regions.

Table 13: Distribution of Contract Spending in Geographic Market

Region	% Spending	Cumulative % Spent
St. Louis	41.88%	41.88%
Central	37.22%	79.10%
Kansas City	8.88%	87.98%
KS (KC MSA)	8.06%	96.04%

Northeast	2.23%	98.26%
Southwest	0.89%	99.16%
Southeast	0.75%	99.91%
Northwest	0.09%	100.00%

Source: Analysis of Missouri agency data

Utilization of MBE & WBE in Missouri's Market Area

We have now identified Missouri's product and geographic markets by sub-setting the Final Contract File by both the product market (reproduced in Table 9) and the geographic market (represented above in Table 13). The codes utilized in the tables below are the primary NAICS codes derived from enterprise-level matches in the Dun & Bradstreet Hoovers Database and identified as comprising the State product market. M/WBE status was determined by the process described in the Availability Analysis above.

In the tables below those businesses identified as both minority and woman owned are counted in the MBE and the WBE columns. Table 14 describes total spending by NAICS code in Missouri's market area. The "% Total Spending" column is in reference to total spending in the identified market area.

Table 14: Distribution of Contract Spending by NAICS Code

NAICS Code	% Total Contracts	Total Contract Spending	% Total Spending
423430	4.60%	\$514,674,902	15.50%
423830	3.30%	\$26,533,310	0.80%
424410	1.70%	\$67,220,746	2.00%
441110	7.20%	\$133,019,448	4.00%
443142	0.70%	\$387,081	0.00%
446110	1.40%	\$36,613,688	1.10%
485410	1.00%	\$51,582,398	1.60%
511210	0.60%	\$6,002,256	0.20%
518210	2.50%	\$34,823,252	1.00%
522110	0.90%	\$8,548,653	0.30%
524114	0.60%	\$6,476,820	0.20%
541110	0.90%	\$2,992,433	0.10%
541211	4.00%	\$3,347,676	0.10%
541219	0.40%	\$398,787,819	12.00%
541330	0.90%	\$623,822	0.00%
541511	2.60%	\$28,389,596	0.90%
541512	3.90%	\$516,754,328	15.60%
541513	1.40%	\$238,195,146	7.20%
541611	2.80%	\$6,579,424	0.20%
541612	0.60%	\$1,007,238	0.00%
541618	1.80%	\$10,020,710	0.30%
541690	1.30%	\$17,808,541	0.50%
541720	0.90%	\$33,322,879	1.00%
541810	1.30%	\$16,637,305	0.50%
611699	1.80%	\$15,379,297	0.50%
611710	0.70%	\$5,882,873	0.20%
621111	3.10%	\$59,815,814	1.80%
621420	2.10%	\$74,353,666	2.20%
621900	1.10%	\$4,073,397	0.10%
622210	0.70%	\$54,350,290	1.60%
624110	9.00%	\$543,476,141	16.40%
624190	20.40%	\$235,193,920	7.10%
624310	3.80%	\$100,429,946	3.00%
624410	3.30%	\$40,274,629	1.20%
813319	5.60%	\$25,033,566	0.80%

999990	1.00%	\$3,509,350	0.10%
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Source: Analysis of Missouri agency data

Table 15 disaggregates these observations by percent spent with MBEs and WBEs. Table 16 changes the frame from NAICS code, cross-walking into commodity classification using the method described above. Table 17 disaggregates spending by region and M/WBE status. The limitations of performing a statistical analysis of disparity at a level other than market area are apparent upon inspection. For instance, the absence of MBE or WBE in multiple identified categories and significant difference in magnitude of contract dollars across categories makes meaningful comparisons across category untenable. Conversely, these tables identify geographic, product, and classification groups where meaningful efforts at reducing disparities could produce at the margin, notable improvements in the participation of MBEs and WBEs.

Table 15: Distribution of Spending to MBE/WBE by NAICS Code (as percentage)

NAICS Code	NAICS Code Description	% MBE	% WBE
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	57.58%	0.00%
423830	Industrial Machinery and Equipment Merchant Wholesalers	0.00%	4.29%
424410	General Line Grocery Merchant Wholesalers	0.00%	0.00%
441110	New Car Dealers	6.49%	0.00%
443142	Electronics Stores	0.00%	0.00%
446110	Pharmacies and Drug Stores	0.00%	0.00%
485410	School and Employee Bus Transportation	0.00%	0.00%
511210	Software Publishers	0.00%	0.00%
518210	Data Processing, Hosting, and Related Services	0.00%	0.00%
522110	Commercial Banking	0.00%	0.00%
524114	Direct Health and Medical Insurance Carriers	0.00%	0.00%
541110	Offices of Lawyers	10.53%	5.26%
541211	Offices of Certified Public Accountants	3.49%	0.00%
541219	Other Accounting Services	0.00%	0.00%
541330	Engineering Services	40.00%	10.00%
541511	Custom Computer Programming Services	54.55%	0.00%
541512	Computer Systems Design Services	22.62%	42.86%
541513	Computer Facilities Management Services	73.33%	0.00%
541611	Administrative Management and General Management Consulting Services	0.00%	0.00%
541612	Human Resources Consulting Services	0.00%	0.00%

541618	Other Management Consulting Services	0.00%	12.82%
541690	Other Scientific and Technical Consulting Services	3.57%	0.00%
541720	Research and Development in the Social Sciences and Humanities	0.00%	36.84%
541810	Advertising Agencies	0.00%	53.57%
611699	All Other Miscellaneous Schools and Instruction	0.00%	0.00%
611710	Educational Support Services	21.43%	0.00%
621111	Offices of Physicians (except Mental Health Specialists)	0.00%	0.00%
621420	Outpatient Mental Health and Substance Abuse Centers	0.00%	0.00%
621900	Other Ambulatory Health Care Services	0.00%	0.00%
622210	Psychiatric and Substance Abuse Hospitals	0.00%	0.00%
624110	Child and Youth Services	0.00%	0.00%
624190	Other Individual and Family Services	0.91%	0.00%
624310	Vocational Rehabilitation Services	0.00%	0.00%
624410	Child Day Care Services	0.00%	0.00%
813319	Other Social Advocacy Organizations	0.00%	0.00%
999990	Nonclassifiable Establishments	0.00%	0.00%

Source: Analysis of Missouri agency data

Table 16: Distribution of MBE and WBE contracts by Classification

Classification Code	Total Contracts	MBE	WBE	% MBE	% WBE	Total Spent All Contracts
Services	1700	84	64	4.94%	3.76%	\$2,539,540,015
Goods, Supplies, Commodities	406	67	3	16.50%	0.74%	\$778,449,174
Construction Related Services	20	8	2	40.00%	10.00%	\$623,822
Nonclassified Establishments	21	0	0	0.00%	0.00%	\$3,509,350

Source: Analysis of Missouri agency data

As Table 17 indicates, the preponderance of State spending with M/WBEs occurred in both the St. Louis and Central regions, with nearly no spending occurring outside of the St. Louis, Central, and Kansas City regions.

Table 17: Distribution of Spending to MBE/WBE by Region (as Percentage)

Region	% Spending	Cumulative % Spent
St. Louis	80.92%	80.92%
Central	13.69%	94.61%
Kansas City	5.38%	99.99%
Southeast	0.01%	100.00%
Southwest	0.00%	100.00%
Northeast	0.00%	100.00%
Northwest	0.00%	100.00%

Source: Analysis of Missouri agency data

It is important to note that there is a wide dispersion in how contracts are allocated by NAICS Code as well as by relevant demographic classification. The legal standard of narrow tailoring highlights the need to understand not only patterns of utilization for Minority-owned Business Enterprises in aggregate, but how utilization breaks down along the relevant racial and ethnic classifications that constitute the overall MBE category. To do so, we leveraged the data from the Office of Equal Opportunity M/WBE Directory of firms that have had M/WBE status over any of the FY 2014-2021 period. There are 416 individual MBEs in the dataset; 257 of the firms were able to be matched in the Dun & Bradstreet Hoovers database for NAICS Codes. Of this, 73 have a NAICS Code in the top 40 codes that represent the State of Missouri product market. As Table 18 indicates, only 45 firms received Chapter 34 contracts in this time period. Because firms can be owned by several individuals, all with different demographic characteristics, the counts in the Table are fractional. The Hoovers MBE counts represents the number of firms in the Missouri geographic market that are in each of the NAICS industry classification, or the potential universe of vendors in each classification. The Count of MBE column represents the number of firms identified as MBE having received a Chapter 34 contract, followed by columns representing demographic breakdowns for those firms.

Table 18: Distribution of Chapter 34 Contracts by Industry and Demographic Characteristic of Owner

NAICS	NAICS Description	Hoovers MBE Counts	Count of MBE in Directory	African American	Asian Indian	Asian Pacific	Hispanic	Native American
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	15	0	0	0	0	0	0
423830	Industrial Machinery and Equipment Merchant Wholesalers	11	0	0	0	0	0	0
424210	Drugs and Druggists' Sundries Merchant Wholesalers	11	0	0	0	0	0	0
424410	General Line Grocery Merchant Wholesalers	3	0	0	0	0	0	0
441110	New Car Dealers	5	0	0	0	0	0	0
443142	Electronics Stores	14	0	0	0	0	0	0
446110	Pharmacies and Drug Stores	4	0	0	0	0	0	0
485410	School and Employee Bus Transportation	1	1	0	1	0	0	0
522110	Commercial Banking	0	0	0	0	0	0	0
541110	Offices of Lawyers	39	5	3	0	1	1	0
541211	Offices of Certified Public Accountants	9	1	1	0	0	0	0
541219	Other Accounting Services	11	0	0	0	0	0	0
541330	Engineering Services	93	5	2.33	1.33	1	0.33	0
541511	Custom Computer Programming Services	81	2	0	2	0	0	0
541512	Computer Systems Design Services	101	5	0	1.5	1	2	0
541513	Computer Facilities Management Services	3	1	1	0	0	0	0
541611	Administrative Management and	128	8	7	1	0	0	0

	General Management Consulting Services							
	Human Resources							
541612	Consulting Services	16	0	0	0	0	0	0
	Other Management							
541618	Consulting Services	139	3	1	0	0	1	1
	Other Scientific and Technical Consulting							
541690	Services	26	0	0	0	0	0	0
	Research and Development in the Social Sciences and							
541720	Humanities	3	0	0	0	0	0	0
541810	Advertising Agencies	13	1	1	0	0	0	0
	All Other							
	Miscellaneous							
	Schools and							
611699	Instruction	26	0	0	0	0	0	0
	Educational Support							
611710	Services	9	1	0	0	0	1	0
	Offices of Physicians (except Mental Health							
621111	Specialists)	14	2	2	0	0	0	0
	Outpatient Mental							
	Health and Substance							
621420	Abuse Centers	4	0	0	0	0	0	0
	Psychiatric and							
	Substance Abuse							
622210	Hospitals	0	0	0	0	0	0	0
	Child and Youth							
624110	Services	0	0	0	0	0	0	0
	Other Individual and							
624190	Family Services	2	2	1	1	0	0	0
	Vocational							
	Rehabilitation							
624310	Services	6	1	1	0	0	0	0
	Child Day Care							
624410	Services	60	1	1	0	0	0	0
	Other Social							
	Advocacy							
813319	Organizations	1	0	0	0	0	0	0
	Electronic Computer							
334111	Manufacturing	2	0	0	0	0	0	0

511210	Software Publishers	7	0	0	0	0	0	0
	Data Processing,							
	Hosting, and Related							
518210	Services	11	1	1	0	0	0	0
	All Other Information							
519190	Services	2	0	0	0	0	0	0
	All Other							
	Nondepository Credit							
522298	Intermediation	2	0	0	0	0	0	0
	Direct Health and							
	Medical Insurance							
524114	Carriers	3	0	0	0	0	0	0
	Other Ambulatory							
621900	Health Care Services	28	0	0	0	0	0	0
	Nonclassifiable							
999990	Establishments	379	5	4	0	0	1	0

C. Statistical Analysis of Disparity

Methodological Framework

We use the “custom census” approach to estimate the availability of minority- and woman-owned enterprises in Missouri’s market area. Arriving at these estimates in a warranted manner is critical for the legitimate analysis of the State’s commitment to equal opportunity in contracting activity. A more complete description of best practices with regard to carrying out the custom census is found at the National Disparity Study Guidelines.¹¹⁴ Availability estimates are weighted by “% total spending” from Table 16 and compared with utilization rates in terms of percentage of market contract dollars spent on minority and woman owned businesses.

The custom census approach is considered the preferred method for estimating the availability of MBEs and WBEs in the State Market. Collette Holte and Associates identify at least four reasons for the superiority of the custom census approach.¹¹⁵ It enables an internally consistent and rigorous “apples to apples” comparison of available firms contracted and firms available for contracting. It “casts a broader net”, catching more of the potential MBEs and WBEs than relying on administrative data alone. This broad net produces statistical findings that are less reflective of legacy biases which may have produced administrative data. It is less likely to be influenced by firm size in the

¹¹⁴ Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program. NCHRP report 644.

¹¹⁵ State of Missouri Office of Administration Disparity Study 2014

composition of availability ratios. Firm size may reflect capacity which in turn may be associated with legacy disparities in contracting. Finally, the custom census has been vetted and approved by “every court that has reviewed it.”¹¹⁶

Estimation of M/WBE Availability

To conduct the custom census we took the following steps:

- Created a comprehensive database of State Contracting activities in the relevant timeframe and administrative units;
- Identified the State’s geographic market;
- Identified the State’s product market by six-digit NAICS code;
- Queried Dun & Bradstreet’s Hoovers data base for each of the product market NAICS codes in the identified geographic market;
- Developed raw counts of all businesses, minority-owned businesses and woman-owned businesses from the Hoovers database;
- Updated the Hoovers data with gathered administrative data;
- Updated further via intensive manual survey process.

We describe above the process followed to arrive at the State’s geographic and product market. Based on that process we determine the share of total dollars spent in each NAICS code in the market. That information is reported in Table 9 and used in the weighting process.

We purchased access to the Dun and Bradstreet-Hoovers database and formulated a series of queries generating a list of all businesses in a geographic market that have a NAICS code in the relevant product market. The Hoovers data contains over 15 million records, is constantly updated, and revised each quarter. The Hoovers data allows us to accurately count the constituent enterprises in the product and geographic market for the legally defensible disparity study.

The Hoovers database does contain data regarding the status of businesses owned by minorities and women. However, despite the extensive scope of Hoovers not all businesses are in the database, some MBE/WBEs are in the database but not identified as being owned by a woman or minority, some businesses that are not owned by a woman or minority are spuriously identified as such.¹¹⁷ The custom census approach is designed to address these issues.

We supplement the Hoovers data with the extensive search of administrative lists of MBE and WBEs described in the Availability Study. As discussed in connection with the

¹¹⁶ State of Missouri Office of Administration Disparity Study 2014 (p. 78)

¹¹⁷ Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program. NCHRP Report 644 (p 39)

Availability Study the process of combining these data is considerable. When merging the availability data to the Hoovers data for the availability analysis, we only keep those observations which have a record in the Hoovers database. This maintains the 'apples to apples' comparability of M/WBEs and non- M/WBEs.

Finally, we identify a sample of businesses to determine the "misclassified" businesses (incorrectly identified as M/WBEs) which would create an upward bias, and the "nonclassified" business (not identified as M/WBEs when they are) which would create a downward bias.

Table 19 reports the unweighted availability of minority-owned and woman-owned businesses by NAICS code in the State's geographic market.

Table 19: Unweighted availability

NAICS	MBE	WBE	non-MBE/WBE
621900	1.18%	2.54%	96.28%
541512	5.53%	5.91%	88.56%
624110	0.80%	0.80%	98.40%
423430	7.19%	6.33%	86.48%
541219	1.87%	12.87%	85.26%
624190	0.84%	1.03%	98.13%
541513	8.63%	6.02%	85.35%
524114	2.20%	2.20%	95.59%
441110	0.98%	1.92%	97.10%
518210	2.77%	7.44%	89.79%
999990	0.96%	1.36%	97.68%
624310	2.20%	6.64%	91.16%
541511	4.34%	4.78%	90.88%
541720	1.60%	5.63%	92.77%
541810	2.67%	10.17%	87.15%
522110	0.80%	0.80%	98.40%
424410	1.60%	4.53%	93.88%
443142	1.46%	3.99%	94.55%
541611	3.46%	6.36%	90.18%
621420	2.06%	7.41%	90.53%
621111	0.92%	4.25%	94.83%
622210	0.80%	12.01%	87.19%
485410	1.83%	1.83%	96.33%
424210	3.80%	8.98%	87.23%
519190	2.37%	4.47%	92.89%
624410	2.40%	22.07%	75.53%

541330	4.40%	4.98%	90.63%
813319	0.82%	0.92%	98.26%
522298	1.24%	5.24%	93.53%
446110	1.03%	4.14%	94.82%
423830	1.63%	4.74%	93.63%
334111	5.89%	10.97%	83.14%
511210	2.44%	5.95%	91.62%
541612	5.25%	14.97%	79.78%
611699	1.25%	7.09%	90.39%
611710	4.72%	15.59%	79.68%
541211	1.25%	8.04%	90.71%
541110	1.21%	4.69%	94.10%
541690	3.71%	7.85%	88.45%
541618	1.77%	3.27%	94.96%

Source: Analysis of Missouri agency data

To meet the legal requirement that availability estimates be “narrowly tailored”¹¹⁸ we weighted the availability estimates of MBE and WBE by NAICS code using the State’s spending practices as reported in Table 14. The aggregate weighted availabilities reported in Table 20 compile the findings of Table 14, modifying them by percentage of dollars spent by NAICS code to generate a single metric of aggregate availability by demographic group.

Table 20: Aggregate Availability

Demographic Group	Aggregate Availability
MBE	2.93%
WBE	5.11%
non-MBE/WBE	91.96%

Source: Analysis of Missouri agency data

To meet the strict scrutiny requirement of the Disparity Study portion of the Small Business Impact Study we generate disparity ratios for minority-owned businesses, woman-owned businesses, as well as those businesses not owned by either a minority or a woman. Consistent with the precedent established in the 2014 Disparity Study we remove the outlier contracts associated with NAICS code 423430 before generating our disparity index.¹¹⁹

¹¹⁸ 49 CFR §26.45

¹¹⁹ State of Missouri Office of Administration Disparity Study 2014 (p. 72)

We generate a “disparity index” by comparing the State’s utilization of MBEs and WBEs to the weighted availability of MBEs and WBEs. This index is sometimes also referred to as a “disparity ratio”. This index reports the participation of a group in the State’s market contracting in light of the availability of said group in the State’s industry and geographic market. An index value under 100 percent indicates that the state’s contracting is underperforming market availability. Courts use the disparity index when determining if the requirements of strict scrutiny has been met. The reference value adopted by courts to determine the existence of discrimination of “substantive” significance is 80%.¹²⁰ It is possible to calculate index values that are not statistically significant and so we used a *t*-test to determine if the values reported are statistically significant at the .05 level. We find substantive evidence of discrimination with regard to Woman-Owned Enterprises. There is minimal statistical and substantive difference between our results, presented in Table 21, and those reported in the 2014 Report.

Table 21: Ratios by Demographic Group

Demographic Group	Disparity Ratio	Significance
Minority Owned Business Enterprises	98.87%	Not Significant
Woman Owned Business Enterprises	27.27%	Substantive Significance
Non-M or WBE Owned Business Enterprises	104.08%	Statistical Significance

Source: Analysis of Missouri agency data

¹²⁰ 29 C.F.R. § 1607.4(D) (“A selection rate for any race, sex, or ethnic group which is less than four-fifths (4/5) (or eighty percent) of the rate for the group with the highest rate will generally be regarded by the Federal enforcement agencies as evidence of adverse impact, while a greater than four-fifths rate will generally not be regarded by Federal enforcement agencies as evidence of adverse impact.”).

IV. Analysis of Race and Gender Barriers in the Missouri Economy

This analysis explores how discrimination in the state’s market and throughout the wider economy affects the ability of minorities and women to engage in the state’s contract opportunities fairly and fully. Utilizing U.S. Bureau of the Census datasets from 2019 (the Survey of Business Owners¹²¹ and the American Community Survey 5-Year PUMS¹²²), we quantify the number and size of M/WBEs in Missouri. Then we analyze the annual payroll (as a proxy for earnings) from those firms compared to their relative prevalence. We then conduct two inferential analyses: (1) an analysis of disparity in wages, leveraging the Public Use Microdata Sample (PUMS) of the American Community Survey, and (2) an analysis in disparity in business formation using the Kauffman Index of Entrepreneurial Activity, Current Population Survey. Finally we conduct a literature review of barriers to business formation. The courts have repeatedly held that analysis of disparities in the rates at which M/WBEs in the government’s markets form businesses compared to similar non-M/WBEs, and their earnings from such businesses, are highly relevant to the determination whether the market functions properly for all firms regardless of the race or gender of their ownership.¹²³

Table 22 presents information on which NAICS codes were used to define each sector evaluated in the Census data.

Table 22: Associated Two-Digit NAICS Codes by Sector

Sector	Census Sector Label	2-Digit NAICS Codes
Construction	Construction	23
Construction-related Services	Professional, Scientific, and Technical Services	54
Goods/Supplies/Commodities	Goods	11, 21, 22, 31, 42, 44
Services	Services	48, 51, 52, 53, 55, 56, 61, 62, 71, 72, 81, 99

¹²¹ <https://www.census.gov/programs-surveys/sbo/about.html>

¹²² https://www2.census.gov/programs-surveys/acs/tech_docs/pums/ACS2016_2020_PUMS_README.pdf

¹²³ National Academies of Sciences, Engineering, and Medicine 2010. *Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/14346>, p. 23.

A. Disparities in Firm Size and Payroll

First, our analysis considers the descriptive statistics of firm M/WBE composition drawn from the Census Bureau’s Survey of Business Owners, subsetting for Missouri. One way to measure business equity is to examine the share of total payroll relative to the share of total firms, using 2019 Census data for Missouri M/WBE firms, all industries as summarized in Table 23.

Table 23: 2019 Census Data for Missouri Businesses

Primary Ownership	Number of Firms	Number of Employees	Sum of Annual Payroll
MBE	266	103,336	\$2,495,022
WBE	105	576,034	21,524,759
M/WBE ¹²⁴	139	26,415	1,263,879
White Male	289	3,098,391	129,917,715
All Firms	799	3,804,176	\$155,201,375

Source: UMKC calculations from the Census Bureau 2019 Survey of Business Owners

Parity would be represented by the ratio of payroll share over the share of total firms equaling 100% (*i.e.*, a group has 10% of total payroll and comprises 10% of all firms.) A ratio that is less than 100% indicates an underutilization of a demographic group, and a ratio of more than 100% indicates an overutilization of a demographic group. Table 24 presents disparity ratios for all industries.

¹²⁴ The Survey of Business Owners provides a category for M/WBE, which references organizations owned by a woman who also fits a minority classification. The State of Missouri does not use this category for its internal data, but in the interest of reporting data exactly as collected, we report M/WBE in Tables 27, 28, and 29.

Table 24: Payroll Disparity Ratios for All Industries

Primary Ownership	Number of Firms	Percent of Total Firms	Percent of Total Payroll	Annual Payroll Disparity Ratio
MBE	266	33%	2%	5%
WBE	105	13%	14%	106%
M/WBE	139	17%	1%	5%
White Male	289	36%	84%	231%
All Firms	799	100%	100%	100%

Source: UMKC calculations from the Census Bureau 2019 Survey of Business Owners

Table 25 breaks out disparity ratios by industry subcategory.

Table 25: Payroll Disparity Ratios by Industry Subcategory

Primary Ownership	Construction	Construction Related	Goods, Supplies and Commodities	Services
MBE	3%	3%	4%	7%
WBE	145%	112%	30%	151%
M/WBE	0%	19%	0%	4%
White Male	242%	336%	235%	212%
All Firms	100%	100%	100%	100%

Source: UMKC calculations from the Census Bureau 2019 Survey of Business Owners

B. Inferential Analysis of Disparities in Wages

Wages represent the predominant mechanism for American families to generate wealth, and likewise are a central element of concern for the distribution of macroeconomic wealth in the state of Missouri. Here we present an inferential analysis that leverages the Public Use Microdata Sample (PUMS) generated by the Census Bureau through the

American Community Survey. PUMS is a dataset that captures the socioeconomic characteristics of individuals across the United States; our analysis selects only observations for individuals in Missouri. The PUMS data represents about 1% of the American population in any given year and is weighted to represent the characteristics of the entire population. This Study uses the 5-year PUMS data for the years 2016-2020.

The inferential analysis developed here is called a multiple linear regression. Linear regression is a common technique to ascribe the influence of independent variables, in this case, race or gender, on a dependent variable of interest, which in this case is an individual's wage. The interpretation of this analysis requires a comparative group against which a change in the dependent variable will be compared. For this analysis our comparator group are White Males. Lastly, an inferential analysis relies on a measure of confidence that we have in the relationship between an independent variable and a dependent variable, holding all other variables constant. This measure of confidence is called a p-value, or the probability that if we were to pull many samples of American individuals that we would get a different result than the one that we find in our analysis. So, a p-value of less than .05 would mean that if we were to run this study on 100 independent samples of individuals, in less than five times would our demonstrated relationship not hold. We only report confidence values of $p < .10$, meaning that one should not interpret any coefficient that would result in more than 10 out of 100 samples would show a false confidence in the results.

Table 26 presents the analysis of the construction classification.

Table 26: Earnings Relative to White Men, Construction Classification

Demographic	Earnings Relative to White Men (% Change)	p-value
Asian or Pacific Islander	0.0382	
Black	-0.2774	$p < 0.01$
Hispanic	-0.0254	
Native American	-0.3887	$p < 0.01$
Other	-0.3279	$p < 0.1$
White Women	-0.3301	$p < 0.001$

Source: Census ACS PUMS

The interpretation of Table 26 is that in the Construction industries derived from the NAICS codes in that classification, a Black individual in Missouri would earn 27.7% less than that of a White man, holding all other variables constant. Likewise, a Native American individual would earn 38.9% less than a White man, a White Woman would earn 33% less.

The same analysis was created looking to the earnings of the self-employed in order to round out a full picture of income dynamics for Missouri individuals (Table 27).

Table 27: Self-Employed Earnings Relative to White Men, Construction Classification

Demographic	Earnings Relative to White Men (% Change)	p-value
Asian or Pacific Islander	-0.9202	
Black	-0.0857	
Hispanic	0.2960	
Native American	0.0658	
Other	-0.2047	p<0.1
White Women	0.0491	

Source: Census ACS PUMS

Table 27 indicates that only the Other category was significant and able to be interpreted. An individual in the other category would earn 20.5% less than a White man, holding all other variables constant. The lack of confidence in the other independent variables may be attributable to the smaller sample of individuals who are self-employed resulting in greater variation (sometimes called ‘noise’) as compared to the relationship modeled.

When considering the classification of construction-related services, we see that Hispanics, Native Americans, and White Women all receive substantially lower wages than White men (Table 28). The analysis of construction-related services (Table 29) yields no significant relationship between the demographic variables and self-employed earnings, which again might be indicative of a relatively small sample of individuals in each demographic category or the fact that there could be great variance in self-employed earnings making the trend hard to define.

Table 28: Earnings Relative to White Men, Construction-Related Services Classification

Demographic	Earnings Relative to White Men (% Change)	p-value
Asian or Pacific Islander	-0.1478	
Black	-0.1498	
Hispanic	-0.3909	p<0.05
Native American	-0.8761	p<0.01
Other	0.0613	
White Women	-0.3942	p<0.001

Source: Census ACS PUMS

Table 29: Self-Employed Earnings Relative to White Men, Construction-Related Services Classification

Demographic	Earnings Relative to White Men (% Change)	p-value
Asian or Pacific Islander	-0.1838	
Black	0.3449	
Hispanic	0.1332	
Native American	-0.4956	
Other	0.0598	
White Women	0.1163	

Source: Census ACS PUMS

The Goods, Supplies, and Commodities classification yields a highly significant relationship between demographic characteristics and the percent change in wages as compared to White men (Table 30). For example, Black individuals earn 17.4% less than White men in this classification, while White women earn 30.3% percent less.

Table 30: Earnings Relative to White Men, Goods, Supplies, and Commodities Classification

Demographic	Earnings Relative to White Men (% Change)	p-value
Asian or Pacific Islander	-0.1725	p<0.001
Black	-0.1737	p<0.001
Hispanic	-0.0892	p<0.001
Native American	-0.2704	p<0.001
Other	-0.2678	p<0.001
White Women	-0.3035	p<0.001

Source: Census ACS PUMS

Self-employment income for Goods, Supplies, and Commodities yields an even stronger effect size compared to wages (Table 31). For example, Black individuals receive 37.7% less in this classification as compared to White men; likewise, White women receive 46.8% less.

Table 31: Self-Employed Earnings Relative to White Men, Goods, Supplies, and Commodities Classification

Demographic	Earnings Relative to White Men (% Change)	p-value
Asian or Pacific Islander	0.1795	
Black	-0.3774	p<0.01
Hispanic	0.1015	
Native American	-0.2738	
Other	-0.6719	p<0.01
White Women	-0.4676	p<0.001

Source: Census ACS PUMS

The final classification for consideration is Services, which exhibits a similar pattern to the previous industry classifications. As Table 32 indicates, Asian or Pacific Islander, Black, Hispanic, White Women, and ‘Other’ individuals all have significantly lower wages than White men. The effect size is particularly large for White Women, with the analysis indicating that they receive 42% lower wages than White men.

Table 32: Earnings Relative to White Men, Services Classification

Demographic	Earnings Relative to White Men (% Change)	p-value
Asian or Pacific Islander		
Islander	-0.2330	p<0.001
Black	-0.2733	p<0.001
Hispanic	-0.0924	p<0.01
Native American	-0.0426	
Other	-0.1376	p<0.01
White Women	-0.4200	p<0.001

Source: Census ACS PUMS

Lastly, self-employed earnings for individuals in the services classification indicates that Asian or Pacific Islander individuals have 58% higher self-employment earnings relative to White men as well as Native American individuals have 78% higher earnings (Table 33):

Table 33: Self-Employed Earnings Relative to White Men, Services Classification

Demographic	Earnings Relative to White Men (% Change)	p-value
Asian or Pacific Islander	0.5853	p<0.05
Black	0.0677	
Hispanic	0.4346	
Native American	0.7795	p<0.01
Other	-0.1506	
White Women	-0.6417	p<0.001

Source: Census ACS PUMS

The overarching trend across all industry classifications is that individuals in minority racial or gender classifications, as compared to White Men, make substantially and significantly less in either wage or self-employed earnings.

C. Inferential Analysis of Disparities in Business Formation

An essential pathway to wealth creation for American families has been through the creation of new ventures through the entrepreneurial process. In fact, the state of Missouri is quite proud of its storied history of entrepreneurship. Contracting with a unit of government can be a pathway for creating stable income for entrepreneurial ventures; the analysis presented here looks at the differential experience of demographic groups in creating new ventures as entrepreneurs as well as self-employed individuals.

Here we present two sets of tables, those that present raw rates of entrepreneurial venture creation and self-employment and those that present an inferential analysis of demographic variables on the creation of new ventures. The data is drawn from the Kauffman Index of Entrepreneurial Activity (KIEA). The Kauffman Index, commissioned by the Ewing Marion Kauffman Foundation, is administered by the Bureau of Labor Statistics and the Census Bureau through the Current Population Survey (CPS). The CPS is a panel survey of American individuals; the KIEA uses questions specifically about individuals' experiences in starting new businesses.

The inferential analysis used here is a logistic regression. Similar to the multiple linear regression used in Part B (above), a logistic regression ascribes an effect of independent variables on a dependent variable of interest. In this case, the dependent variable is whether individuals had created a new business in the previous month, where they worked for at least 15 hours or more in a week. The dependent variable is weighted to represent the entire American population. Only Missouri individuals were included in this analysis. Because the dependent variable, whether a new venture was created, is a binary (yes or no) variable, logistic regression is more appropriate as compared to linear

regression. Interpretation of the results is based on the probability of starting a business as compared to White men.

First, we compare the raw rates of entrepreneurship and entrepreneurship plus self-employment. Self-employment represents activities where individuals may generate income for themselves but do not involve the creation of a new business in the past month; this composite category then captures both new business formation, work for one's own formal existing business, as well as self-employment in a non-formal business setting. Table 34 indicates rates for the entire sample of Missouri residents.

Table 34: Rate of Entrepreneurship and Self-Employment for Missouri Individuals

Demographics	Entrepreneurship	Entrepreneurship
	Rate	or Self-Employed Rate
Asian or Pacific		
Islander	0.1%	4.1%
Black	0.2%	3.8%
Hispanic	0.4%	4.3%
Native American	0.0%	10.2%
Other	0.6%	6.4%
White Women	0.2%	6.4%
White Men	0.4%	11.9%

Source: Census CPS

The raw rates of business formation as well as self-employment indicate that White men are self-employed or create new businesses at three times the rate of Black individuals, close to three times the rate of Hispanic individuals, and almost twice the rate of White women.

We then are able to break down the rates by industry classification: construction (Table 35), construction-related services (Table 36), goods, supplies and commodities (Table 37), and services (Table 38).

Table 35: Rate of Entrepreneurship and Self-Employment in Construction Classification, Missouri Individuals

Demographics	Entrepreneurship Rate	Entrepreneurship or Self-Employed Rate
Asian or Pacific Islander	0.00%	12.00%
Black	1.27%	12.66%
Hispanic	2.17%	13.04%
Native American	0.00%	0.00%
Other	4.76%	28.57%
White Women	0.81%	14.23%
White Men	0.61%	21.51%

Source: Census CPS

Table 36: Rate of Entrepreneurship and Self-Employment in Construction-Related Services Classification, Missouri Individuals

Demographics	Entrepreneurship Rate	Entrepreneurship or Self-Employed Rate
Asian or Pacific Islander	0.00%	0.00%
Black	0.00%	0.00%
Hispanic	0.00%	23.08%
Other	0.00%	0.00%
White Women	0.65%	18.71%
White Men	0.95%	12.32%

Source: Census CPS

Table 37: Rate of Entrepreneurship and Self-Employment in Goods, Supplies, and Commodities Classification, Missouri Individuals

Demographics	Entrepreneurship Rate	Entrepreneurship or Self-Employed Rate
Asian or Pacific Islander	0.0%	2.3%
Black	0.0%	0.8%
Hispanic	0.0%	0.9%
Native American	0.0%	26.3%
Other	0.0%	0.0%
White Women	0.5%	8.0%
White Men	0.5%	9.9%

Source: Census CPS

Table 38: Rate of Entrepreneurship and Self-Employment in Services Classification, Missouri Individuals

Demographics	Entrepreneurship Rate	Entrepreneurship or Self-Employed Rate
Asian or Pacific Islander	0.2%	4.7%
Black	0.2%	4.2%
Hispanic	0.2%	3.2%
Native American	0.0%	6.8%
Other	0.4%	6.7%
White Women	0.1%	5.9%
White Men	0.3%	10.8%

Source: Census CPS

A striking feature across all industry classifications is the seemingly low rate of business creation in any given month, although this might be expected even in a highly entrepreneurial state such as Missouri. A commonality is that White men tend to have a much higher entrepreneurship rate as well as a higher composite entrepreneurship and self-employment rate as compared to other racial and gender groups.

The next element is to create an inferential analysis. Inferential statistics take into account a sense of confidence that one can have in how the results related to a sample will actually be reflected in the entire population of individuals in Missouri. In addition, an inferential analysis allows for the researcher to leverage the weighting that the Bureau of Labor Statistics and the Census created in order to better account for the population of

the United States. As stated above, one can interpret a logistic regression as a probability to create a new business as compared to a White man.

Table 39 indicates that Black individuals are 78% less probable to start a new business as compared to White men. Likewise, White women are 44% less probable to start a new business.

Table 39: Probability of Missouri Individuals to Create a New Business, As Compared to White Men

Demographic	Entrepreneurship Probability Relative to	
	White Men	p-value
Asian or Pacific Islander	-0.3528	p<0.05
Black	-0.7824	
Hispanic	-0.1403	
Native American	-12.4844	
Other	0.1608	p<0.01
White Women	-0.4429	

Source: Census CPS

When we consider each of the industry classifications, there is a more nuanced picture. For example, Table 40 shows results for the construction classification where Hispanic individuals are 51% more like to form a new business.

Table 40: Probability of Missouri Individuals in the Construction Classification to Create a New Business, As Compared to White Men

Demographic	Entrepreneurship Probability Relative to	
	White Men	p-value
Asian or Pacific Islander	-14.6996	p<0.05
Black	0.9927	
Hispanic	1.5127	
Native American	-16.0955	
Other	3.0143	p<0.01
White Women	0.3362	

Source: Census CPS

None of the variables are significant for the probability of individuals to form a new business in the construction-related services (Table 41), goods, supplies and commodities (Table 42), and the services (Table 43) classifications. This means that there is no

interpretation to be gained other than highlighting that either the sample was too small to pick up on a trend or that there is sufficient variance in experiences with entrepreneurship in this classification to have a significant understanding of how demographics impact on new business creation.

Table 41: Probability of Missouri Individuals in the Construction-Related Services Classification to Create a New Business, As Compared to White Men Entrepreneurship

Demographic	Probability Relative to White Men	p-value
Asian or Pacific Islander	-18.8679	
Black	-16.1099	
Hispanic	-18.4378	
Native American	-0.21657	
Other	-0.54302	
White Women	-0.0471	

Source: Census CPS

Table 42: Probability of Missouri Individuals in the Goods, Supplies and Commodities Classification to Create a New Business, As Compared to White Men Entrepreneurship

Demographic	Probability Relative to White Men	p-value
Asian or Pacific Islander	-16.0850	
Black	-16.1045	
Hispanic	-16.1266	
Native American	-16.0896	
Other	-16.0942	
White Women	0.1474	

Source: Census CPS

Table 43: Probability of Missouri Individuals in the Services Classification to Create a New Business, As Compared to White Men

Entrepreneurship Probability Relative to		
Demographic	White Men	p-value
Asian or Pacific Islander	-0.4952	
Black	-0.6777	
Hispanic	-0.8967	
Native American	-12.1277	
Other	0.0982	
White Women	-1.0304	

Source: Census CPS

D. Disparities in Business Formation: Literature Review

The literature on barriers to access to commercial credit and the development of human capital reports that minorities continue to face constraints on their entrepreneurial success based on race. These constraints negatively impact the ability of firms to form, to grow, and to succeed.

According to the Federal Reserve, in 2019 there were a total of 5,771,292 employer firms (businesses with more than one employee), of which only 2.3% (134,567) were Black-owned, even though Black people comprise 14.2% of the country's population.¹²⁵

There is a causal relationship between discriminatory policy and wealth accumulation, and there is a direct correlation between wealth and business development. A 2018 study by the U.S. Small Business Administration found that 90 percent of entrepreneurs start their businesses using personal or family wealth. But the study finds that Black entrepreneurs are more likely to rely on personal credit cards to finance their business creation. This is due in part to barriers to bank loans and other sources of institutional capital, but also the result of inequities in the levels of wealth held by Americans of different racial groups.¹²⁶

According to a 2010 Department of Commerce report¹²⁷, “Minority owned businesses

¹²⁵ Changes in U.S. Family Finances from 2016 to 2019: Evidence from the Survey of Consumer Finances, Federal Reserve Bank.

<https://www.federalreserve.gov/publications/files/scf20.pdf>.

¹²⁶ <https://advocacy.sba.gov/2018/02/01/financing-patterns-and-credit-market-experiences-a-comparison-by-race-and-ethnicity-for-u-s-employer-firms/>

¹²⁷ <https://archive.mbda.gov/page/executive-summary-disparities-capital-access-between-minority-and-non-minority-businesses.html>

experience higher loan denial probabilities and pay higher interest rates than white-owned businesses even after controlling for differences in credit-worthiness, and other factors.”

A 2022 Brookings Institute Report projects the proportion of Black and non-Black businesses at the metropolitan level using 2018 and 2020 Census Bureau’s Annual Business Survey (ABS) data.¹²⁸ The report finds that of the 69 metro areas in the US for which the ABS reports data, no metro area in the U.S. has a share of Black-owned employer firms that matches or exceeds the Black population in the area. For the metro area of St. Louis the study concludes:

3,112 Black businesses, accounting for 6% of employer businesses. If Black businesses accounted for 19.5% of employer firms (equivalent to the Black population in St. Louis), there would be 9,448 more Black businesses.

Black businesses create an average of 6 jobs per firm, compared to 25 for all businesses. If the average employees per Black business reached parity, it would create approximately 58,609 new jobs.

Black businesses pay their employees an average of \$20,333, compared to \$50,639 for all businesses. If Black businesses paid this much, then those employees would see an increase in total pay by approximately \$598,487,872.

E. Conclusion

Overall, the results of our analyses of the Missouri economy demonstrate that minorities and women, especially minority women, continue to face race- and gender-based barriers to equal opportunities as firm owners that impact their ability to form firms and to earn income from those firms. This suggests that absent some affirmative intervention in the current operations of the marketplace, the state will function as a passive participant in these potentially discriminatory outcomes.

¹²⁸ https://www.brookings.edu/wp-content/uploads/2022/02/Black-business-report_PDF.pdf

V. Analysis of Chapter 8 Contracts

A. Contract Data Sources and Sampling Method

The Study analyzed Chapter 8 contract data for fiscal years 2014 through 2021 for the State of Missouri. The Office of Facilities Management Design & Construction (FMDC) is charged with procuring construction and facilities for the State of Missouri. Here you will find the analysis of Chapter 8 purchases: availability, utilization, and statistical analysis of disparity.

B. Data Sources and Sampling Method

The contract data analyzed in Appendix C is for fiscal years 2014 through 2021 for Chapter 8 purchases conducted by FMDC. There were 1,750 contracts identified for this time period. Contract data was provided to the Team in two formats: as (1) .PDF files drawn from a legacy Access database used by FMDC for part of the study period, (2) access to the e-Builder system that currently serves as the repository for active contracts, also in .PDF format.

The Team hand-coded a stratified random sample of 10% of Chapter 8 contracts ($n = 175$). Stratification was conducted on Fiscal Year, with a random selection of 10% of each year being drawn for coding. Of the 175 prime contracts, there were an additional 85 subcontractors also hand coded for analysis.

C. Utilization Analysis

We reorganized the Final Contract File at the 2-digit NAICS Code level to analyze state utilization according to four classification categories (goods/supplies, services, construction, construction-related services, see Table D1). The schema provided in Table 44 is informed by the US Bureau of Labor Statistics and provides a template for our attribution practices.¹²⁹ Those enterprises with a 2-digit NAICS code of 99 and those we were not able to identify a NAICS code are grouped together as “Non-classified Establishments.”

¹²⁹ https://www.bls.gov/iag/tgs/iag_index_naics.htm

Table 44: Two-Digit NAICS Code by Sector

Commodity Classifications	NAICS Codes
	23
Construction	
Services	44 - 93
	21, 431300, 541510, 541330, 541620, 541990, 562910,
Construction Related Services	811310,
Goods, Supplies, Commodities	11, 31-33, 42, 44
	99, and non-classified
Non-classified Establishments	establishments

Table 45 describes the number of contracts and the dollar amount spent in each classification category. As a note, this represents the amount spent in our sample, not the total of all FMDC¹³⁰ contracts. It also describes the percentage of total spending by classification category. We find a small amount (2.5%) of total spending allocated to non-classified establishments, and a similarly small amount (1.9%) of total spending allocated to Goods, Services, and Commodities.

Table 45: Contracts by Classification

Classification Category	Count	Amount Spent	Percent Spent
Services	15	\$4,702,417	12.30%
Goods, Supplies, Commodities	17	\$726,225	1.9%
Construction Related Services	44	\$8,949,634	23.5%
Construction	100	\$22,780,616	59.8%
Non-classified Establishments	9	\$949,084	2.5%

Source: Analysis of Missouri Agency Data; Hoovers

Table 46 reports utilization of MBE and WBE by classification category as a raw count of enterprises and as a dollar sum disbursed to those enterprises. Clearly the construction classification dominates the value of contracts for MBEs and WBEs as measured as a count and a dollar value.

¹³⁰ Note that FMDC contracts is synonymous with Chapter 8 contracts. We use the FMDC verbiage in this section to indicate that all data was provided by FMDC.

Table 46: MBE and WBE by Classification Category

Classification Category	MBE Count	WBE Count	MBE Total Dollar Value of Contracts	WBE Total Dollar Value of Contracts
Services	7	3	\$761,314	\$123,176
Goods, Supplies, Commodities	8	5	\$259,706	\$187,718
Construction Related Services	7	7	\$435,869	\$276,330
Construction	23	25	\$2,183,925	\$2,897,076
Non-classified Establishments	0	9	\$0	\$949,084

Source: Analysis of Missouri Agency Data; Hoovers

Table 47 looks at MBE and WBE utilization in percentage terms. This table reports the percentage of enterprises associated by classification category that are identified as MBE or WBE. It also reports the percentage of total spending associated with a classification category that is associated with an MBE or a WBE.

Table 47: MBE and WBE Percentage Utilization

Classification Category	Percent MBE	Percent WBE	MBE Percent of Total Contract Dollars	WBE Percent of Total Contract Dollars
Services	46.7%	20.0%	16.2%	2.6%
Goods, Supplies, Commodities	47.1%	29.4%	35.8%	25.8%
Construction Related Services	15.9%	15.9%	4.9%	3.1%
Construction	23.0%	25.0%	9.6%	12.7%
Non-classified Establishments	0.0%	100.0%	0.0%	100.0%

Source: Analysis of Missouri Agency Data; Hoovers

Table 48 provides counts for the number of prime state contractors that subcontracted with an MBE or WBE and the dollar value of those subcontracts.

Table 48: Count of Prime Contracts with MBE or WBE Subcontractors

Classification Category	Contracts w/ MBE Subcontract Awards	Contracts w/ WBE Subcontract Awards	Dollar Value of MBE Subcontracts	Dollar Value of WBE Subcontracts
Services	7	3	\$761,314	\$123,176
Goods, Supplies, Commodities	8	4	\$259,706	\$187,718
Construction Related Services	5	4	\$333,619	\$126,499
Construction	18	17	\$1,851,525	\$1,395,218
Non-classified Establishments	0	9	\$0	\$949,084

Source: Analysis of Missouri Agency Data; Hoovers

Table 49 provides percentages for the number of prime state contractors with MBE or WBE subcontractors and the percentage of contract awards spent on MBE and WBE subcontractors.

Table 49: Percentage of Prime Contracts with MBE or WBE Subcontractors

Classification Category	% Contracts w/ MBE Subcontract Awards	% Contracts w/ WBE Subcontract Awards	% Total Dollar Value of MBE Subcontracts	% Total Dollar Value of WBE Subcontracts
Services	46.7%	20.0%	16.2%	2.6%
Goods, Supplies, Commodities	47.1%	23.5%	35.8%	25.8%
Construction Related Services	11.4%	9.10%	3.7%	1.4%
Construction	18.0%	17.0%	8.1%	6.1%
Non-classified Establishments	0.0%	100.0%	0.0%	100.0%

Source: Analysis of Missouri Agency Data; Hoovers

Table 50 reports the number of prime contracts awarded to minority-owned businesses and woman-owned businesses in the FMDC sample.

Table 50: Prime Contracts to MBE and WBE

Classification Category	MBE Contracts Awarded	WBE Contracts Awarded
Services	0	0
Goods, Supplies, Commodities	1	1
Construction Related Services	3	5
Construction	8	12
Non-classified Establishments	0	0

Source: Analysis of Missouri Agency Data; Hoovers

We have compiled a list of those minority and woman owned enterprises identified by name and receiving State contract dollars in the FMDC sample. The list includes the name of the enterprise, number of contracts associated with each enterprise, and the dollar amount awarded to each enterprise. The list is provided in Appendix D.

D. The State of Missouri Product and Geographic Markets

FMDC Product Market

This section echoes the work of identifying the extent of Missouri's industry market in an empirically warranted manner for the FMDC sample. The process used for Chapter 34 contracts is replicated here, although with the major caveat that this is a random stratified sample of FMDC contracts as opposed to the population-level analysis for Chapter 34 contracts.

The requirement for industry market determination is that the product market capture the "vast bulk" of State spending. There is no clear numerical level which indicates what percentage accounts meets this requirement. A regular rule of thumb with regard to this spending is 75% of the prime contract and subcontract payments¹³¹ for the study period on the basis of the 6-digit North American Industry Classification System (NAICS).¹³² Table 51 presents the complete list of NAICS codes contained in the FMDC sample. We used 90% of sample spending to define the product market in the analysis of disparity section below. Table 51 also contains a description of each NAICS code as well as the percentage of FMDC spending associated with each code, and a running tally of cumulative spending for the NAICS Codes.

¹³¹ https://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_644.pdf

¹³² <https://www.bls.gov/bls/naics.htm>

Table 51: Percentage Distribution of Total Spending by NAICS Code

NAICS Code	Description of Code	Percent of Total Spending	Cumulative Spending
	Commercial and Institutional Building Construction	23.00%	23.00%
236220	Architectural Services	14.20%	37.20%
541310	Office Administrative Services	9.60%	46.80%
561110	Engineering Services	8.50%	55.30%
541330	Roofing Contractors	6.60%	61.90%
238160	Plumbing, Heating, and Air-Conditioning Contractors	5.20%	67.10%
238220	Electrical Contractors and Other Wiring Installation Contractors	4.40%	71.50%
238210	Siding Contractors	4.10%	75.70%
238170	Site Preparation Contractors	3.50%	79.20%
238910	Non-classifiable Establishments	2.50%	81.70%
999990	New Single-Family Housing Construction (except For-Sale Builders)	2.50%	84.10%
236115	Industrial Building Construction	2.10%	86.30%
236210	Water and Sewer Line and Related Structures Construction	2.00%	88.30%
237110	Poured Concrete Foundation and Structure Contractors	2.00%	90.30%
238110	All Other Support Activities for Transportation	1.60%	91.90%
488999	All Other Specialty Trade Contractors	1.30%	93.20%
238990	Drywall and Insulation Contractors	1.00%	94.20%
238310	Environmental Consulting Services	0.60%	94.80%
541620	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	0.50%	95.30%
423610	Asphalt Paving Mixture and Block Manufacturing	0.50%	95.80%
324121	Highway, Street, and Bridge Construction	0.50%	96.20%
237310	Other Heavy and Civil Engineering Construction	0.50%	96.70%
237990	Industrial Supplies Merchant Wholesalers	0.40%	97.10%
423840	Painting and Wall Covering Contractors	0.40%	97.40%
238320	Nonresidential Property Managers	0.30%	97.80%
531312	Appliance Repair and Maintenance	0.30%	98.10%
811412	Remediation Services	0.30%	98.30%
562910			

	New Multifamily Housing Construction (except		
236116	For-Sale Builders)	0.20%	98.60%
561990	All Other Support Services	0.20%	98.80%
238390	Other Building Finishing Contractors	0.20%	99.00%
332322	Sheet Metal Work Manufacturing	0.20%	99.10%
236118	Residential Remodelers	0.10%	99.30%
524210	Insurance Agencies and Brokerages	0.10%	99.40%
442110	Furniture Stores	0.10%	99.50%
	Other Commercial Equipment Merchant		
423440	Wholesalers	0.10%	99.60%
442210	Floor Covering Stores	0.10%	99.70%
	Power and Communication Line and Related		
237130	Structures Construction	0.10%	99.70%
	All other Miscellaneous Store Retailers (Except		
453998	Tobacco Stores)	0.10%	99.80%
561790	Other Services to Buildings and Dwellings	0.00%	99.80%
238150	Glass and Glazing Contractors	0.00%	99.90%
431300	Architectural and Engineering Services	0.00%	99.90%
	All Other Miscellaneous Fabricated Metal Product		
332999	Manufacturing	0.00%	99.90%
	Metal Service Centers and Other Metal Merchant		
423510	Wholesalers	0.00%	100.00%
	All Other Miscellaneous Wood Product		
321999	Manufacturing	0.00%	100.00%
	All Other Miscellaneous Electrical Equipment and		
335999	Component Manufacturing	0.00%	100.00%
238130	Framing Contractors	0.00%	100.00%

Source: Analysis of Missouri Agency Data

Table 51 includes all spending in the FMDC sample. Due to the size of the sample, we do not separate out contracts above \$50,000 and contracts listed as \$50,000 and below. We observe Prime contracts to account for 84.3% of spending in the FMDC sample.

E. Missouri's Geographic Market

It is a requirement for the State to limit their race- and gender-conscious contracting programs to its market area. It is not acceptable to assume the geographic market of the State is confined within the boundaries of the state. With that said, the geographic market is empirically determined. Table 56 indicates that 95% of spending in the sample was within the state of Missouri, and this geography will be used as the geographic market for

subsequent analyses. Table 52 also indicates cumulative spending for several listed geographies.

Table 52: Distribution of Contract Spending by State

State Geography	Count	Total Spent	% Spent	Cumulative % Spending
MO	178	\$36,179,928	94.90%	94.90%
KS	4	\$954,062	2.50%	97.44%
Not Determined	2	\$848,986	2.20%	99.67%
IL	1	\$125,000	0.30%	100.00%

Source: Analysis of Missouri agency data.

F. Utilization of MBE & WBE in Missouri's Market Area

We have now identified Missouri's product and geographic markets by sub-setting the Final Contract File for Chapter 8 by both the product market (reproduced in Table 51) and the geographic market (represented above in Table 52). The codes utilized in the tables below are the primary NAICS codes derived from enterprise level matches in the Dun & Bradstreet Hoovers Database and identified as comprising the State product market. MBE/WBE status was determined by the process described in the Availability Analysis for the full Study.

Table 53 describes total spending by NAICS code in Missouri's market area. The "% Total Spending" column is in reference to total spending in the identified market area.

Table 53: Distribution of Contract Spending by NAICS Code

NAICS Code	% Total Contracts	Total Contract Spending	% Total Spending
236115	3.20%	\$945,735	2.5%
236116	0.50%	\$82,145	0.2%
236118	1.00%	\$48,825	0.1%
236210	1.00%	\$818,592	2.1%
236220	16.80%	\$8,782,654	23.0%
237110	0.50%	\$780,259	2.0%
237130	0.50%	\$23,985	0.1%
237310	3.10%	\$173,251	0.5%
237990	0.50%	\$173,025	0.5%
238110	1.10%	\$747,533	2.0%
238130	0.50%	\$5,400	0.0%
238150	0.50%	\$18,125	0.0%

238160	4.30%	\$2,516,454	6.6%
238170	0.50%	\$1,578,917	4.1%
238210	4.30%	\$1,678,068	4.4%
238220	4.10%	\$1,990,274	5.2%
238310	1.60%	\$380,500	1.0%
238320	1.60%	\$140,227	0.4%
238390	0.50%	\$75,229	0.2%
238910	0.50%	\$1,335,761	3.5%
238990	2.60%	\$485,657	1.3%
321999	4.30%	\$7,155	0.0%
324121	0.50%	\$180,763	0.5%
332322	0.50%	\$74,752	0.2%
332999	0.50%	\$8,265	0.0%
335999	0.50%	\$5,975	0.0%
423440	0.50%	\$34,733	0.1%
423510	0.50%	\$8,245	0.0%
423610	0.50%	\$189,647	0.5%
423840	1.60%	\$153,385	0.4%
431300	2.70%	\$11,950	0.0%
442110	0.50%	\$39,310	0.1%
442210	0.50%	\$23,995	0.1%
453998	0.50%	\$23,194	0.1%
488999	0.50%	\$617,904	1.6%
524210	2.60%	\$47,070	0.1%
531312	0.50%	\$125,000	0.3%
541310	0.50%	\$5,396,002	14.2%
541330	7.60%	\$3,224,459	8.5%
541620	13.00%	\$219,722	0.6%
561110	1.50%	\$3,670,451	9.6%
561790	1.50%	\$18,410	0.0%
561990	0.50%	\$76,106	0.2%
562910	1.10%	\$97,500	0.3%
811412	1.10%	\$124,281	0.3%
999990	0.50%	\$949,084	2.5%

Source: Analysis of Missouri agency data

Table 54 disaggregates these observations by percent spent on MBEs and WBEs. Table 55 changes the frame from NAICS code by cross-walking into commodity classification using the method described above. Note that the results reported in Tables 54 and 55 should be interpreted as reflecting the FMDC sample, percentages may reflect sample bias.

Table 54: Distribution of Spending to MBE/WBE by NAICS Code (as percentage)

NAICS	NAICS Description	% MBE	% WBE
236115	New Single-Family Housing Construction (except For-Sale Builders)	33.33%	33.33%
236116	New Multifamily Housing Construction (except For-Sale Builders)	0.00%	0.00%
236118	Residential Remodelers	0.00%	50.00%
236210	Industrial Building Construction	0.00%	0.00%
236220	Commercial and Institutional Building Construction	3.23%	12.90%
237110	Water and Sewer Line and Related Structures Construction	100.00%	0.00%
237130	Power and Communication Line and Related Structures Construction	0.00%	100.00%
237310	Highway, Street, and Bridge Construction	83.33%	0.00%
237990	Other Heavy and Civil Engineering Construction	0.00%	0.00%
238110	Poured Concrete Foundation and Structure Contractors	50.00%	0.00%
238130	Framing Contractors	0.00%	100.00%
238150	Glass and Glazing Contractors	100.00%	0.00%
238160	Roofing Contractors	0.00%	37.50%
238170	Siding Contractors	0.00%	0.00%
238210	Electrical Contractors and Other Wiring Installation Contractors	37.50%	25.00%
238220	Plumbing, Heating, and Air-Conditioning Contractors	12.50%	37.50%
238310	Drywall and Insulation Contractors	0.00%	100.00%
238320	Painting and Wall Covering Contractors	33.33%	33.33%
238390	Other Building Finishing Contractors	100.00%	0.00%
238910	Site Preparation Contractors	20.00%	40.00%
238990	All Other Specialty Trade Contractors	62.50%	25.00%
321999	All Other Miscellaneous Wood Product Manufacturing	0.00%	100.00%
324121	Asphalt Paving Mixture and Block Manufacturing	0.00%	0.00%
332322	Sheet Metal Work Manufacturing	0.00%	100.00%

	All Other Miscellaneous Fabricated Metal Product		
332999	Manufacturing	100.00%	0.00%
	All Other Miscellaneous Electrical Equipment and		
335999	Component Manufacturing	100.00%	0.00%
423440	Other Commercial Equipment Merchant Wholesalers	0.00%	0.00%
	Metal Service Centers and Other Metal Merchant		
423510	Wholesalers	0.00%	100.00%
	Electrical Apparatus and Equipment, Wiring Supplies,		
423610	and Related Equipment Merchant Wholesalers	66.67%	33.33%
423840	Industrial Supplies Merchant Wholesalers	80.00%	20.00%
431300	Architectural and Engineering Services	100.00%	0.00%
442110	Furniture Stores	0.00%	0.00%
442210	Floor Covering Stores	0.00%	0.00%
	All other Miscellaneous Store Retailers (Except		
453998	Tobacco Stores)	0.00%	0.00%
488999	All Other Support Activities for Transportation	100.00%	0.00%
524210	Insurance Agencies and Brokerages	0.00%	100.00%
531312	Nonresidential Property Managers	100.00%	0.00%
541310	Architectural Services	7.14%	28.57%
541330	Engineering Services	16.67%	4.17%
541620	Environmental Consulting Services	33.33%	0.00%
561110	Office Administrative Services	0.00%	0.00%
561790	Other Services to Buildings and Dwellings	100.00%	0.00%
561990	All Other Support Services	0.00%	100.00%
562910	Remediation Services	0.00%	100.00%
811412	Appliance Repair and Maintenance	0.00%	0.00%
999990	Non-classifiable Establishments	0.00%	100.00%

Source: Analysis of Missouri agency data

Table 55: Distribution of MBE and WBE Contracts by Classification

Classification Code	Total	MBE	WBE	%	%	Total Spent
	Contracts			Contracts	Contracts	All
				MBE	WBE	Contracts
Services	15	7	3	46.7%	20.0%	\$4,702,417
Goods, Supplies, Commodities	17	8	5	47.1%	29.4%	\$726,225
Construction Related Services	44	7	7	15.9%	15.9%	\$8,949,634
Construction	100	23	25	23.0%	23%	\$22,780,616
Non-classified Establishments	9	0	9	0.0%	100.0%	\$949,084

Source: Analysis of Missouri agency data

As stated with the utilization of Chapter 34 contracts, it is important to note that there is a wide dispersion in how contracts are allocated by NAICS Code as well as by relevant demographic classification. The legal standard of narrow tailoring highlights the need to understand not only patterns of utilization for Minority-owned Business Enterprises in aggregate, but how utilization breaks down along the relevant racial and ethnic classifications that constitute the overall MBE category. To do so, we leveraged the data from the Office of Equal Opportunity M/WBE Directory of firms that have had M/WBE status over any of the FY 2014-2021 period. There are 416 individual MBEs in the dataset; 257 of the firms were able to be matched in the Dun & Bradstreet Hoovers database for NAICS Codes. Of this, 73 have a NAICS Code in the top 40 codes that represent the State of Missouri product market. As Table 56 indicates, only 51 firms received Chapter 8 contracts in this time period. Because firms can be owned by several individuals, all with different demographic characteristics, the counts in the Table are fractional. The Hoovers MBE counts represents the number of firms in the Missouri geographic market that are in each of the NAICS industry classification, or the potential universe of vendors in each classification. The Count of MBE column represents the number of firms identified as MBE having received a Chapter 8 contract, followed by columns representing demographic breakdowns for those firms.

Table 56: Distribution of Chapter 8 Contracts by Industry and Demographic Characteristic of Owner

NAICS	NAICS Description	Hoovers MBE Counts	Count of MBE in Directory	African American	Asian Indian	Asian Pacific	Hispanic	Native American
236115	New Single-Family Housing Construction (except For-Sale Builders)	74	10	6	0	1	1.5	1.5
236210	Industrial Building Construction	8	0	0	0	0	0	0
236220	Commercial and Institutional Building Construction	67	4	2	0	1	1	0
237110	Water and Sewerline and Related Structures Construction	12	0	0	0	0	0	0
238110	Poured Concrete Foundation and Structure Contractors	19	1	0	0	0	0	1
238160	Roofing Contractors	18	5	2	0	0	3	0

238170	Siding Contractors Electrical Contractors and Other Wiring Installation	1	1	1	0	0	0	0
238210	Contractors Plumbing, Heating, and Air-Conditioning	61	6	3	0	1	0	2
238220	Contractors Site Preparation	55	5	2	0	1	2	0
238910	Contractors	23	4	2	0	0	0.5	1.5
541310	Architectural Services	20	4	1	0	1	1	1
541330	Engineering Services Office Administrative	67	5	2.33	1.33	1	0.33	0
561110	Services Nonclassifiable	44	1	0	0	0	0	1
999990	Establishments	289	5	4	0	0	1	0

G. Statistical Analysis of Disparity

Estimation of M/WBE availability

In the statistical analysis of the FMDC data we took the following steps:

- Created a 10% sample database of FMDC activities stratified by year;
- Identified the FMDC geographic market;
- Identified the FMDC product market by six-digit NAICS code;
- Queried Dun & Bradstreet's Hoovers database for each of the product market NAICS codes in the identified geographic market;
- Developed raw counts of all businesses, minority-owned businesses and woman-owned businesses from the Hoovers database;
- Updated the Hoovers data with gathered administrative data;

We describe above the process followed to arrive at the FMDC geographic and product market. Based on that process we determine the share of total dollars spent in each NAICS code in the market. That information is reported in Table 55 and used in the weighting process.

We purchased access to the Dun and Bradstreet-Hoovers database and formulated a series of queries generating a list of all businesses in a geographic market that have a NAICS code in the relevant product market. The Hoovers data contains over 15 million records, is constantly updated, and revised each quarter. The Hoovers data allows us to accurately count the constituent enterprises in the product and geographic market for the legally defensible disparity study.

The Hoovers database does contain data regarding the status of businesses owned by minorities and women. However, despite the extensive scope of Hoovers not all businesses are in the database, some MBE/WBEs are in the database but not identified as being owned by a woman or minority, some businesses that are not owned by a woman or minority are spuriously identified as such.¹³³ Without an analysis of misclassified and non-classified MBEs and WBEs in the FMDC statistics may reflect bias of an ambiguous magnitude.

We supplement the Hoovers data with the extensive search of administrative lists of MBE and WBEs described in the Availability Study. As discussed in connection with the Availability Study the process of combining these data is considerable. When merging the availability data to the Hoovers data for the availability analysis, we only keep those observations which have a record in the Hoovers database. This maintains the 'apples to apples' comparability of M/WBEs and non- M/WBEs.

Table 57 reports the unweighted availability of minority-owned and woman-owned businesses by NAICS code in the State's geographic market.

Table 57: Unweighted Availability

NAICS	Description of Code	MBE	WBE	non-MBE/WBE
	New Single-Family Housing			
236115	Construction (except For-Sale Builders)	2.04%	2.43%	95.53%
236210	Industrial Building Construction	5.75%	6.80%	87.45%
	Commercial and Institutional Building			
236220	Construction	6.74%	6.97%	86.29%
	Water and Sewer Line and Related			
237110	Structures Construction	3.96%	5.37%	90.67%
	Poured Concrete Foundation and			
238110	Structure Contractors	2.68%	3.64%	93.68%
238160	Roofing Contractors	2.40%	3.65%	93.94%
238170	Siding Contractors	1.96%	3.63%	94.41%
	Electrical Contractors and Other Wiring			
238210	Installation Contractors	4.04%	4.94%	91.02%
	Plumbing, Heating, and Air-			
238220	Conditioning Contractors	2.59%	4.42%	93.00%
238910	Site Preparation Contractors	3.26%	6.92%	89.82%
541310	Architectural Services	4.26%	8.88%	86.86%

¹³³ Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program. NCHRP Report 644 (p 39)

541330	Engineering Services	4.78%	4.98%	90.24%
561110	Office Administrative Services	2.01%	2.75%	95.24%
999990	Non-classifiable Establishments	1.64%	1.96%	96.40%

Source: Analysis of Missouri agency data

To meet the legal requirement that availability estimates be “narrowly tailored”¹³⁴ we weighted the availability estimates of MBE and WBE by NAICS code using the State’s spending practices as reported in Table 51. The aggregate weighted availabilities reported in Table 58 compile the findings of Table 51, modifying them by percentage of dollars spent by NAICS code to generate a single metric of aggregate availability by demographic group. The aggregate availabilities reported in table 61 reflect the FMDC product market identified in Table 57.

Table 58: Aggregate Availability

Demographic Group	Aggregate Availability
MBE	4.17%
WBE	5.61%
non-MBE/WBE	90.21%

Source: Analysis of Missouri agency data

To meet the strict scrutiny requirement of the Disparity Study portion of the Small Business Impact Study we generate disparity ratios for minority-owned businesses, woman-owned businesses, both minority-owned and woman-owned businesses (taking care to avoid double counting), as well as those businesses not owned by either a minority or a woman.

We generate a “disparity index” by comparing the utilization of MBEs and WBEs in the FMDC sample to the weighted availability of MBEs and WBEs in its identified market. This index is sometimes also referred to as a “disparity ratio”. This index reports the participation of a group in the State’s market contracting in light of the availability of said group in the State’s industry and geographic market. An index value under 100 percent indicates that the state’s contracting is underperforming market availability.

Courts use the disparity index when determining if the requirements of strict scrutiny has been met. The reference value adopted by courts to determine the existence of discrimination of “substantive” significance is 80%.¹³⁵ It is possible to calculate index

¹³⁴ 49 CFR §26.45

¹³⁵ 29 C.F.R. § 1607.4(D) (“A selection rate for any race, sex, or ethnic group which is less than four-fifths (4/5) (or eighty percent) of the rate for the group with the highest rate will generally be regarded by the Federal enforcement agencies as evidence of adverse impact, while a greater than four-fifths rate will generally not be regarded by Federal enforcement agencies as evidence of adverse impact.”).

values that are not statistically significant and so we used a *t*-test to determine if the values reported are statistically significant at the .05 level. Table 59 reports no substantive disparities by demographic group for the FMDC data. The result is statistically significant across categories.

Table 59: Ratios by Demographic Group

Demographic Group	Disparity Ratio	Significance
Minority-Owned Business Enterprises	229.99%	Statistical Significance
Woman-Owned Business Enterprises	206.72%	Statistical Significance
Non-Minority or Woman-Owned Business Enterprises	87.37%	Statistical Significance

Source: Analysis of Missouri agency data

VI. Current and Past Procurement Practice Review

A. Sources and Methodology

This review is based on meetings with, and/or interviewing, staff from the Office of Equal Opportunity (OEO), Purchasing, Accounting, Information Technology Services Division, and Facilities Management, Design, Construction (FMDC), as well as research of data sources and State documents that include:

- State of Missouri Statutes (RSMo) Chapters 8 and 34
<https://revisor.mo.gov/main/OneChapter.aspx?chapter=8>
<https://revisor.mo.gov/main/OneChapter.aspx?chapter=34>
- Executive Orders 05-30, 10-24 and 15-06
https://www.sos.mo.gov/library/reference/orders/2005/eo05_030
https://www.sos.mo.gov/library/reference/orders/2010/eo10_024
<https://www.sos.mo.gov/library/reference/orders/2015/eo6>
- Code of State Regulations (1 CSR) 30-5, 40-1 and 10-17
<https://www.sos.mo.gov/cmsimages/adrules/csr/current/1csr/1c30-5.pdf>
- <https://www.sos.mo.gov/cmsimages/adrules/csr/current/1csr/1c40-1.pdf>
- <https://www.sos.mo.gov/cmsimages/adrules/csr/current/1csr/1c10-17.pdf>
- Office of Equal Opportunity (OEO) annual reports from 2015 to 2021
<https://oeo.mo.gov/annual-reports/>
- Department of Purchasing Procurement Manual issued January 25, 2021
- OEO Job descriptions
- OEO directory of certified firms as of March 2022
<https://apps1.mo.gov/MWBCertifiedFirms/>
- SAM II financial reports (State accounting system)
- The Missouri Budget Fiscal Year 2023
<https://oa.mo.gov/budget-planning/budget-information/2023-budget-information>
- Oversight Review Committee Report, 2014 Disparity Study, 1/27/2015
https://oa.mo.gov/sites/default/files/2014_Oversight_Review_Committee_Report.pdf¹³⁶
- Results of FY2020 OEO M/WBE Utilization survey of Executive Departments

The historical analysis of the OEO Annual Reports was complicated by a lack of consistency in how M/WBE utilization was calculated, a lack of agreement regarding how it was to be measured, and a lack of clarity of the underlying data. Staff could not produce the SAM II reports prior to 2020 upon which the data was based, leaving the researchers with low confidence in the consistent treatment of Excludables (sometimes called Excludables or Exclusions) over the study time period. Exempt object codes

¹³⁶ Websites used in the Current and Past Procurement Practice Review were last accessed on June 3, 2022.

include: salaries and benefits, utilities, debt service, tax refunds, lottery payments, distributions/aid/ assistance/payments to agencies, individuals, nonprofits, school districts and other expenditure line items not subject to M/WBE goals. As such, the researchers made the following assumptions/adjustments to the OEO reported data, noted in the footnotes for the subsequent Figures and Tables in this section:

- **Executive Department Totals FY 2015-2021:** recalculated the percentage to be net of Excludables, estimating an Excludables amount for FY 2020 and 2021 based on the average of the prior three years.
- **By Department:**
FY 2015-2018: Recalculated the percentages to be net of Excludables
FY 2019-2021: No adjustment

B. Procurement Authority Overview

The Commissioner of the Office of Administration (OA) has the responsibility under Chapters 8 and 34, RSMO to competitively bid and award contracts for State Agencies. All agencies of state government are served by OA except the Legislative Branch, Judicial Branch, Lottery Commission, the Department of Transportation (except information technology, telecommunications, and printing), and State Colleges and Universities. Within OA, the Division of Purchasing is responsible for the procurement of supplies, equipment and services, and the Division of Facilities Management, Design and Construction (FMDC) is responsible to bid and award capital improvement contracts (design, construction, renovation, and repair of State facilities).

Purchasing has delegated procurement authority to Executive Departments to procure products and services valued up to \$10,000, no bid required. Over \$10,000 and up to \$50,000 Departments have been delegated procurement authority and must solicit competitive bids, with some exceptions allowed for special circumstances¹³⁷. For annual expenditures over \$50,000, Purchasing has procurement authority and must solicit competitive bids.¹³⁸

Per Executive Order 15-06 all State Agencies are required to make every feasible effort to procure ten percent of their goods and services from Minority Business Enterprises (MBEs) and ten percent from Women Business Enterprises (WBEs).¹³⁹ Subcontracting with certified firms is encouraged for all contracts of \$100,000 or greater. OA's Procurement Manual dated January 2021 states:

¹³⁷ Including emergencies, statewide contract availability, single feasible source.

¹³⁸ Effective January 2022 and therefore outside this study's scope: Departments are given procurement authority up to \$100,000 if the procurement officer(s) complete Purchasing's core training courses.

¹³⁹ There are several references throughout State Agency webpages, documents and manuals to an earlier Executive Order 05-30 which sets the targets to 10 percent for MBE and 5 percent for WBE. EO 15-06 supersedes this.

- The Department must ensure that minority-owned businesses, also referred to as Minority Business Enterprises (MBEs), and woman-owned businesses, also referred to as Woman Business Enterprises (WBEs), that are certified by the Office of Administration, Office of Equal Opportunity (OEO) are provided an equitable and fair opportunity to submit bids and receive an award.
- Certified MBEs and WBEs should be utilized for a portion of those procurements that are not required to be bid whenever economically feasible.
- The Department must utilize OEO's Certified M/WBE Vendors Directory as a source for identification of vendors. The Department may utilize the services and assistance of OEO to further identify and qualify prospective MBEs and WBEs.
- The Department should maintain documentation of bids sent to MBEs and WBEs and awards made to MBEs and WBEs in the Department's procurement files. This information may be requested by Purchasing during a Quality Assurance Review of the Department.
- Documenting to OEO where MBEs/WBEs do not seem to be available for a particular needed product or service is beneficial for OEO.
- The Department must ensure proper dissemination of the MBE and WBE participation requirements to all sub-Department locations that exercise a procurement responsibility.

C. Contract Evaluation Overview: Purchasing

Purchasing maintains a listing of upcoming procurement requests currently being prepared on behalf of state agencies for issuance to the public. These procurements offer evaluation scoring consideration to vendors who propose qualified Missouri Office of Equal Opportunity-certified MBE/WBE participation as part of their proposed solution in their procurement response. This advance posting provides an opportunity for vendors to network and to identify potentially viable MBE/WBE/SDVE participation solutions either by means of direct participation or through subcontracting arrangements. Prime contractors can apply for a Feasible Effort Waiver in which they provide information of three vendors each (MBE and WBE) that were contacted before they are excused from the participation goal.

M/WBE participation is a significant factor in contract evaluation. For a procurement that is not strictly low bid, Purchasing's general approach is if the bidder meets the goals, it receives 10 additional points out of 200 total possible points. If the bidder achieves less than the goal(s), it can receive some proportionate number of points as identified in the RFP. Purchasing has discretion to vary these point totals.

Prime contractors submit monthly reports reflecting M/WBE subcontractor usage to Purchasing to aid in monitoring compliance with the contractual commitments. Purchasing may waive this reporting requirement at any time for good cause. However, if

there are multiple services and/or regions, the report provides only overall M/WBE utilization, not further disaggregation.

If a contractor is unable to meet its M/WBE participation level, or if there are other reasons the contractor needs to replace an entity, the contractor must obtain written approval from the Division prior to replacing the entity. If approved, the contractor must obtain other participation in compliance with its original commitment as approved by the Division. If the contractor cannot obtain a replacement, it may apply to the Division for a participation waiver by providing documentation detailing all efforts made to secure a replacement and a Good Cause Statement establishing why the participation level cannot be obtained. If the contractor has met its burden of proof, the Division may grant a M/WBE waiver for good cause.

If the contractor's participation level or payment to a participating M/WBE entity is less than the amount committed, and no M/WBE waiver for good cause has been obtained, the Division may cancel the contract and/or suspend or debar the contractor from participating in future State procurements, or withhold payment to the contractor in an equal amount to the value of the participating commitment less actual payments made by the contractor to the participating entity. If the Division determines that a contractor has become compliant with the commitment amount, any withheld funds shall be released.

OA has developed a Contract Management Guide to standardize processes for the management of its contracts. The Contract Management Guide provides clarity as to the roles and responsibilities for individuals having a role in a contract management function, including the contract managers, project managers, OA and other State Agencies.

Within Purchasing is a Contract Management Section that 1) assists in educating Departments on the required best practices of contract management as outlined in the Contract Management Guide; 2) monitors contractor performance to ensure contractors are meeting their contractual requirements; 3) works with Departments to ensure they are meeting times, scope and budget commitments made to state leadership; and 4) assists Departments with troubleshooting and problem solving when contract and contractor issues arise.

D. Contract Evaluation Overview: Facilities Management, Design and Construction (FMDC)

FMDC is authorized to evaluate M/WBE participation in design contracts, as part of the quality-based selection process. Goals on construction contracts are set contract-by-contract, based on the availability of M/WBEs in the scopes of work of the contract and the applicable geographic area.

For smaller contracts, FMDC makes special efforts to target M/WBEs as prime contractors. For all bids greater than \$100,000, the Bidder shall obtain M/WBE, participation in an amount equal to or greater than the percentage goals set forth in the Invitation for Bid and the Bid Form, unless the Bidder is granted a Good Faith Effort waiver by the Director of the Division. If the Bidder does not meet the M/WBE goals, or make a good faith effort to do so, the Bidder shall be non-responsive, and its bid shall be rejected. Bidders who demonstrate that they have made a good faith effort to include M/WBE participation will be determined to be responsive to the applicable participation goals, regardless of the percent of actual participation obtained, if the bid is otherwise acceptable. Bidder may reach goals for each category by obtaining Actual Participation, Good Faith Effort "GFE" or a combination of both.

The Division reports that 74 contracts totaling \$65 million were granted full or partial GFE for the three year period ended May 2022:

- FY 2019-20, 17 GFEs granted for \$13 million in contracts
- FY 2020-21, 38 GFEs granted for \$32 million in contracts
- FY 2021-22 (through May 15), 19 GFEs granted for \$20 million in contracts.

In determining whether a Bidder has made a good faith effort to obtain M/WBE participation, the following may be evaluated:

1. The amount of actual participation obtained;
2. How and when the Bidder contacted potential M/WBE subcontractors and suppliers;
3. The documentation provided by the Bidder to support its contacts, including whether the Bidder provided the names, addresses, phone numbers, and dates of contact for M/WBE firms contacted for specific categories of work;
4. If project information, including plans and specifications, were provided to M/WBE subcontractors;
5. Whether the Bidder made any attempts to follow-up with M/WBE firms prior to bid;
6. Amount of bids received from any of the subcontractors and/or suppliers that the Bidder contacted;
7. The Bidder's stated reasons for rejecting any bids.

The Contractor shall provide the State with regular reports on its progress in meeting its MBE/WBE/SDVE obligations. At a minimum, the Contractor shall report the dollar-value of work completed by each M/WBE during the preceding month and the cumulative total of work completed by each M/WBE to date with each monthly application for payment. The Contractor shall also make a final report, which shall include the total dollar-value of work completed by each M/WBE during the entire contract.

E. Office of Equal Opportunity

The Office of Equal Opportunity (OEO) within the Commissioner of the Office of Administration is established by Executive Orders 05-30 and 10-24. OEO is tasked with two primary functions: promote a diversified workforce within State Government (workforce diversity) and increase the level of opportunities for M/WBEs seeking to contract with the State (supplier diversity). OEO reports that the current workload is slanted to workforce diversity activities because M/WBE certifications are labor intensive (averaging 110 applicants per month).

OEO's supplier diversity responsibilities include: certification of firms seeking to participate in the program and maintenance of the database of certified vendors; advocacy for M/WBEs; education and outreach, including maintenance of the website and publication of the OEO Newsletter; matchmaking activities between certified firms and state agencies and prime contractors; data gathering; monitoring and reporting.

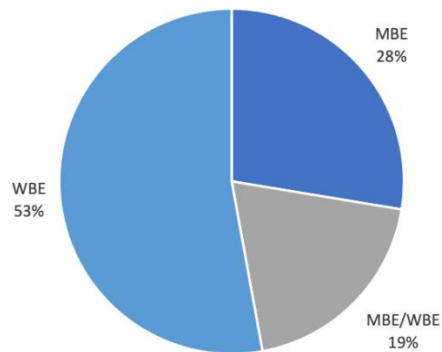
The mission of OEO is to champion opportunities for all individuals and encourage utilization of M/WBEs. Only certified vendors can be counted toward MBE and WBE targets and OEO only certifies "for profit" businesses. 1 CSR 10-17 defines an MBE as a for-profit firm that is at least 51-percent owned, managed and controlled by one or more minority individuals and defines a WBE as a for-profit firm that is at least 51-percent owned and controlled by one or more women. The applicant has the burden of demonstrating by a preponderance of the evidence that it meets the statutory and regulatory requirements for certification. In addition to documentation, on-site visits are conducted for Missouri firms to provide a visual and verbal verification of the M/WBE owner's ability to fulfill certification requirements.

There are three types of certification procedures: initial/standard; rapid response; and out-of-state. The rapid response process allows firms certified by another Missouri-based organization to submit minimal additional documentation and it can be completed in a shorter timeframe than the Standard In-State Certification. Out-of-state applicants may only be certified if their home state allows Missouri-based M/WBEs to be certified in that state. Initial/standard certifications are in effect for three years. Rapid response and out-of-state certifications are effective until the expiration date that appears on the certificate provided to OEO. Firms are required to provide an annual update affidavit.

OEO submits an annual report to the Governor and Commissioner of Administration to summarize the progress made toward achieving the State's diversification goals. The report summarizes workforce diversity, supplier diversity, and procurement data collected from state agency activities.

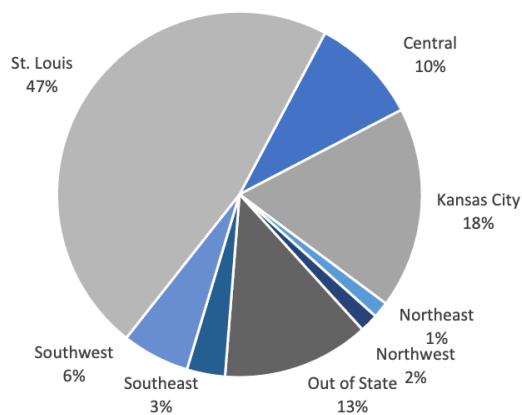
The OEO Directory as of March 2022 had 1,536 certified M/WBE firms (Figure 4). Note that the OEO Directory references a category of MBE/WBE, which are enterprises owned by women who has claim a minority classification; this category is not universally used across the State of Missouri government and is not used in the quantitative analyses of availability, utilization, or statistical measures of disparity.

Figure 4: Percentage Breakdown of M/WBE firms in the OEO Directory



The Directory indicates that there a plurality of firms in St. Louis, with a substantially smaller amount in Kansas City and the Central regions (Figure 5). There is a negligible representation of M/WBE firms in the remain regions of the state.

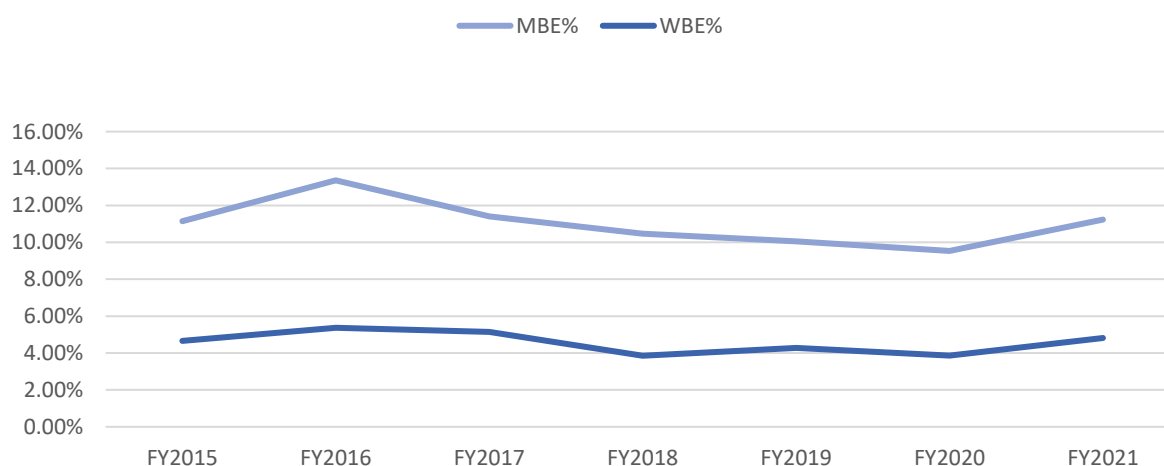
Figure 5: Geographic Distribution of Firms in OEO Directory



F. Review of Other Executive Departments

Figure 6 indicates statewide M/WBE utilization ratios since 2015, as reported in OEO's annual reports.¹⁴⁰

Figure 6: Utilization Ratios Reported in Annual Reports (2015-2021)

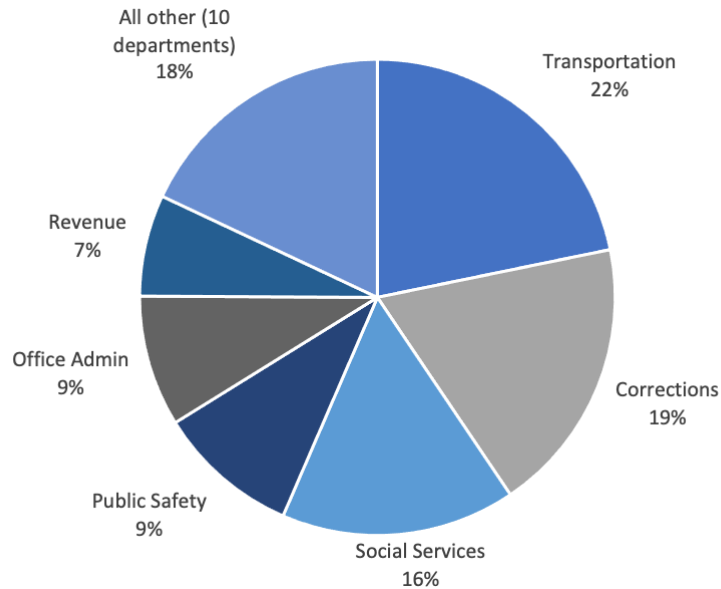


Note: 20% of certified firms are dual MBE and WBE and are recorded in the accounting system as MBE.

The OEO report is based on annual SAM II Financial Reports detailing MBE and WBE expenditures by department. The report delineates contracts issued by Purchasing and those issued by Departments. The Office of Administration comprises less than 10 percent of Executive Department expenditures but nearly 30 percent of M/WBE expenditures for the study period 2015-2021. Executive departments that represent 82% of total expenditures and 88% of M/WBE expenditures during the study period are the Office of Administration, Corrections, Public Safety, Revenue, Social Services, and Transportation.

¹⁴⁰ Adjusted to subtract "Excludables" from total expenditures.

Figure 7 M/WBE Utilization by Department



Since 2015, total M/WBE payments per OEO's annual reports have totaled nearly \$1 billion. Utilization for each department show below (Figure 8).

Figure 8 Utilization by department

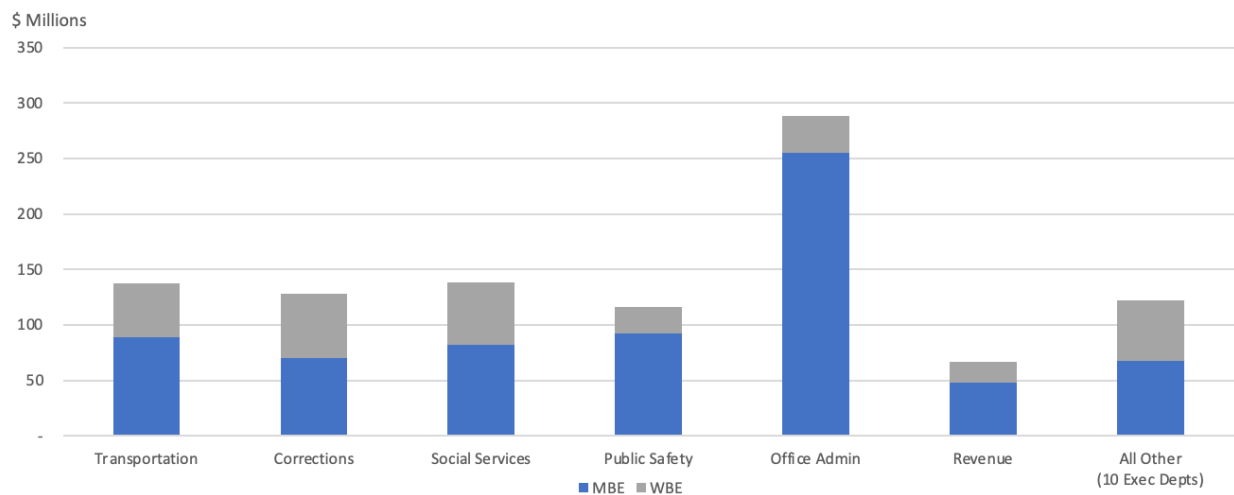
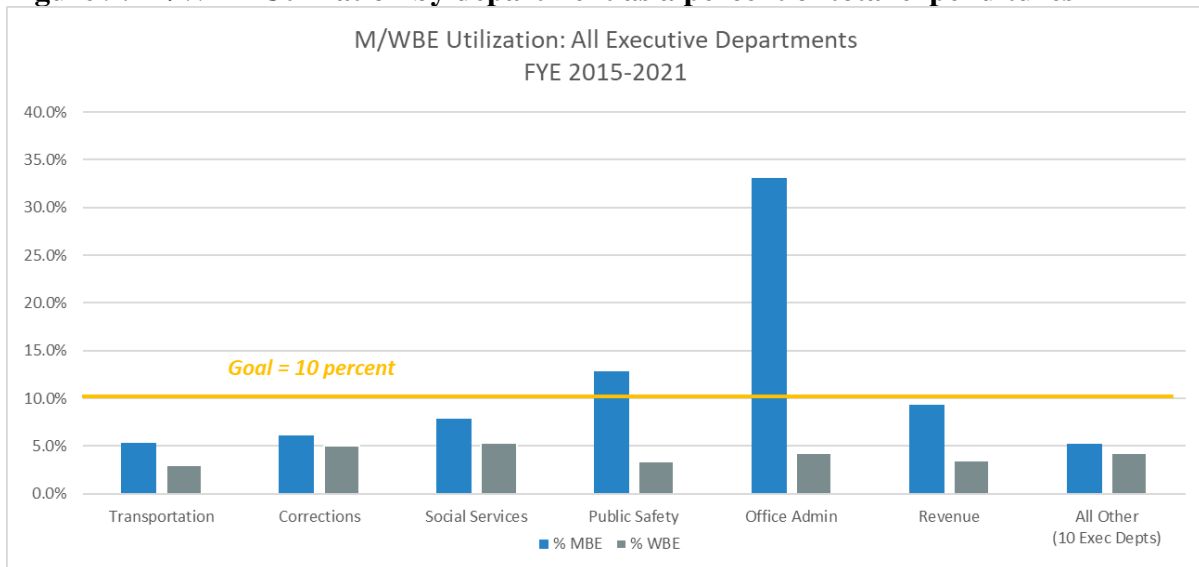


Figure 9: M/WBE Utilization by department as a percent of total expenditures



This procurement practice and policy review focuses on delegated purchasing authority (under \$50,000) for the five Executive Departments that, combined with the Office of Administration, comprise 88% of M/WBE expenditures.

Department of Social Services (14%)

DSS uses e-mail notification, the DSS website, and MissouriBUYS to notify bidders, including MBE/WBE vendors, when issuing procurement opportunities. DSS bids through the Division of Purchasing are posted on MissouriBUYS and DSS provides suggested potential bidders, including MBE/WBE vendors to the Division of Purchasing to include in their bidder notification process.

The DSS procurement function is centralized through the Division of Finance and Administrative Services (DFAS), with centralized purchasing unit staff providing direction and assistance to out-based staff regarding access to existing contracts. The centralized purchasing unit is also responsible for coordinating the contracting activities for the entire department. DFAS staff regularly discuss MBE/WBE goals with program division staff. Monthly MBE/WBE expenditure reports are made available to DSS management and program division staff to review and evaluate. Procurement staff work with program division staff to review procurement policies and procedures to ensure current practices align with EO 05-30 compliance efforts. In addition, procurement staff receive ongoing training regarding MBE/WBE initiatives.

DSS initiatives to increase M/WBE participation include: 1) detailed analysis of expenditures to identify additional opportunities for M/WBE vendors; 2) identifying and

soliciting MBE/WBE vendors for specific procurement opportunities; 3) promoting the use of M/WBE vendors for discretionary purchases that do not require a bid, and 4) outreach to certified M/WBE vendors to encourage their participation in DSS and other state procurement opportunities.

According to DSS, the availability of M/WBE vendors for specific types of human services and social services programs can be very limited, if available at all. Additionally, many DSS service providers are not-for-profit organizations which the Department suggests should not be included in the M/WBE expenditure review.

Department of Transportation (14%)

The Missouri Department of Transportation's Disadvantage Business Enterprise (DBE¹⁴¹) Program has the following objectives:

- To ensure nondiscrimination in the award and administration of contracts in MoDOT's highway, transit, and airport financial assistance programs.
- To create a level playing field on which DBEs can compete fairly for contracts.
- To ensure that the MoDOT's DBE program stays in accordance with applicable law.
- To ensure that only firms that fully meet eligibility standards are permitted to participate as DBEs.
- To help remove barriers to the participation of DBEs in DOT-assisted contracts.
- To promote the use of DBEs in all types of federally assisted contracts and procurement activities conducted by recipients.
- To assist the development of firms that can compete successfully in the marketplace outside the DBE program.

MoDOT's supportive services program is designed to assist DBE firms in the development of capability and capacity and to be better positioned to successfully bid on MoDOT project. Programs include the Entrepreneurship Training Program, Business Coaching Program, DBE Seminars and Outreach, and the Mentor-Protégé Program. Certified vendors may be certified through the Office of Administration as well as the Missouri Regional Certification Committee.

Department of Corrections (13%)

¹⁴¹ As noted in Footnote 76, DBE programs are associated with the U.S. Department of Transportation or those jurisdictions using U.S. DOT funds.

The Department of Corrections utilize the Office of Equal Opportunity's M/WBE Directory in preparing a bidders list for all solicitations. As certified M/WBE vendors are found that can provide commodities or services to the DOC, this information is communicated to the institution/division business managers for possible utilization for local, under threshold purchases. The DOC utilizes the MissouriBUYS eProcurement system for formal and informal bids.

The primary impediment to M/WBE participation is a lack of certified vendors in the appropriate commodities and services that have the capability to service statewide or in the geographic areas where DOC facilities are located. There are no certified M/WBE vendors to provide sex offender treatment services. There are no certified, MBE substance abuse treatment services, and only one certified WBE who provides substance abuse treatment services.

Department of Public Safety (11%)

DPS continues to encourage M/WBE to participate in the State of Missouri's purchasing program. When contracts come up to bid they are placed on the MissouriBuys platform and sent out to prospective vendors based on the object code. DPS utilizes a purchase requisition process to ensure purchases are made using State contracts and utilize M/WBE vendors when possible. DPS advertises bid availability, both in print and on our website and Facebook pages. Additionally, we encourage field staff to seek and utilize M/WBE vendors when servicing fleet vehicles.

Purchases made with MVE are required when the product is offered by MVE, which disallows a purchase from an M/WBE vendor. Participation in statewide mandatory contracts that utilize vendors who are not M/WBE. Limited by budget restrictions and existing contracts and programs. Limited availability of M/WBE firms.

Department of Revenue (7%)

Department Buyers include M/WBE language in all RFPs and award points for certified vendors. Buyers primarily use MissouriBuys which identifies a vendor as a M/WBE vendor. They also utilize the OEO's M/WBE Directory and other sources in the Kansas City and St. Louis area to search for possible vendors on all bids and purchases. The Department solicits bids for statewide license offices to process motor vehicle and driver license transactions. The license offices collect and retain fees mandated by statute to offset the costs associated with operating the office in lieu of receiving payments from the State. The Department also solicits bids for non-State banking services. The contractor is paid from interest earnings. Points are awarded in the evaluation process for any direct or sub-contracted M/WBE work. However, the costs are not included in those M/WBE expenditures since entities are paid from fee retention and interest earnings.

Technical and complex service requirements specific to Department systems limit the number of qualified vendors that can provide services to the Department. Additionally, the Department's experience has been M/WBE vendors do not offer the goods or services being procured or have indicated they cannot handle the volume associated with the scope of the contract.

In a survey of all Executive Departments conducted by OEO in 2020, Departments were asked to briefly explain what measures are in place to increase participation in their agency's M/WBE expenditures, and identify any impediments for low participation rates within their agency's M/WBE expenditures.

Policies, procedures, processes, and practices related to M/WBE utilization as directly reported by Departments, include:

- New employees are required to attend a Purchasing training as part of their New Employee Orientation that includes discussion on M/WBE goals; emphasis is placed on seeking minority- and women-owned business when bidding.
- We review past expenditures with appropriate staff to identify more opportunities for M/WBE utilization.
- We encourage staff to seek viable M/WBE vendors for purchases that do not require bidding.
- We encourage known minority and women vendors to become certified with the state of Missouri's M/WBE program.
- We use e-mail notification and MissouriBUYS to notify M/WBE vendors, when issuing procurement opportunities.
- We regularly discuss M/WBE goals with program division staff. Monthly M/WBE expenditure reports are made available to management and program division staff to review and evaluate progress.
- Procurement staff works with program division staff to review procurement policies and procedures to ensure current practices align with M/WBE goals. In addition, procurement staff receive ongoing training regarding M/WBE initiatives.
- Conduct detailed analysis of expenditures to identify additional opportunities for M/WBE vendors.
- Identify and solicit M/WBE vendors for specific procurement opportunities.
- Promote the use of M/WBE vendors for discretionary purchases that do not require a bid.
- Outreach to certified M/WBE vendors to encourage their participation in procurement opportunities.
- Require M/WBE goals of our partners and our financial assistance recipients.

In the 2020 survey, Executive Departments cited several reasons that utilization ratios as currently calculated do not fairly reflect their commitment to the program. The current practice of calculating M/WBE utilization by department:

(Total dollar value of M/WBE contracts) divided by (departmental expenditures less exempt object codes).

Exempt object codes (sometimes called Excludables or Exclusions) have been identified to determine how much of a department's total annual expenditures are subject to M/WBE utilization goals. Exempt object codes include: salaries and benefits, utilities, debt service, tax refunds, lottery payments, distributions/aid/ assistance/payments to agencies, individuals, nonprofits, school districts.

Agencies sometimes require specialized procurements. A sole-source contract in which only one vendor can provide the requisite goods or services may offer limited minority or women opportunities. This could be due to the size of the contract, the region of the state in which the contract is located, or the specific industry involved. When agencies are required to use a specified vendor as a result of a statewide contract, the respective agency has limited control over the minority or woman participation on that contract. The Department of Corrections has multiple correctional and supervision centers throughout the entire state. Most of these facilities are located in small towns or rural communities where the department is committed to supporting the local economy. Similarly, the Department of Conservation may rely on local or rural retail outlets to supply grounds maintenance or feed supply products. These types of goods dictate the necessity for short-term, non-contractual relationships. Responses identifying impediments include:

- Statewide mandatory contracts sometimes utilize vendors who are not M/WBE. To have such purchases reflect negatively on individual agencies does not accurately represent those agencies' commitment to meeting their MBE and WBE goals.
- Challenges to locate M/WBE vendors who can provide equipment and services for specialized needs.
- Technical and complex service requirements specific to Department systems limit the number of qualified vendors that can provide services to the Department
- M/WBE vendors do not offer the goods or services being procured or have indicated they cannot handle the volume associated with the scope of the contract.
- A lack of certified vendors in the appropriate commodities and services that have the capability to service statewide or in the geographic areas where facilities are located.
- Difficulty for the Department to achieve participation goals in these areas due to a lack of certified MBE/WBEs. For most of the areas, there are either no certified MBE/WBE vendors, or there are only one or two certified vendors. Where vendors may exist, a list of those vendors has been distributed to the divisions along with a link to the MBE/WBE Directory.
- Motor Fuel - The Division utilizes the mandated WEX program. Because fuel continues to be one of the largest expenditures, there is little room for improvement in this category.

- Vehicle Repair & Maintenance - While most of the Division's Jefferson City based fleet is maintained by the OA garage, due to the location of our field staff statewide, it is often impractical for them to come to Jefferson City for repairs. In those situations, staff is encouraged to seek local M/WBE vendors. However, there are relatively few maintenance facilities that are M/WBE that they've been able to locate.
- Other Professional Service - established agreements (AOC, SDA, etc.) with specialized entities (FBI, APCO, LEXIS NEXIS, Accudata Credit Systems, and Equifax) for performing background and credit checks. These entities have no M/WBE affiliation.

Departments offered the following recommendations:

- Assistance from the OEO office in creating a better awareness of the M/WBE program, attracting new vendors, as well as in the education of our staff on the M/WBE process, use of the directory, and assisting in locating vendors in areas we have high spend levels, but low participation would be welcome.
- A department recommends that P-card purchases be automatically included in agency MBE and WBE participation numbers. The department utilizes the P-card to makes purchases from a number of MBE and WBE vendors as an efficiency measure, and these purchases not being reflected in the MBE and WBE utilization percentages creates conflict between the goal of meeting or exceeding the MBE and WBE utilization objectives and the goal of utilizing department resources in the most efficient and effective means possible.
- The ability to account for M/WBE purchases, when using the State's procurement card (UMB), could increase utilization for all agencies. Purchases on contract and off-contract can be paid using the purchasing card, making the data difficult to track from SAM II. The UMB system captures the MBE or a WBE information, therefore, if the participation information is not extracted from UMB, the SAM II payments to UMB should be excluded to provide an accurate representation. There should also be discussion regarding how this payment data will be available from the new ERP system.
- A department noticed some companies that they do business with are certified as MBE or WBE vendors in other states but are not certified as such in Missouri. The department recommends the use of a universal certification or reciprocal certification program so companies would only have to go through the certification process once, which would increase the number of certified vendors available to state agencies.

G. Current and Past Procurement Practice: Findings

Barriers: Contract details are insufficient to rule out if there are barriers to full participation of MBEs and WBEs caused by State procurement practices.

A challenge for procurement professionals and OEO staff is the differing understandings of what data is to be collected, when it is to be collected, and how that data is to be used for management decision making. The program review along with staff, business owner and stakeholder interviews suggest that the State is implementing the program in conformance with strict constitutional scrutiny. However, statewide data does not currently exist in the quantity and form required for quantitative validation.

Resources: Lack of sufficient funding and significant staff turnover impedes OEO program management, data collection, goal setting, certification process, compliance, and outreach programs.

With the completion of the 2014 Disparity Study a list of recommendations was made by the 2014 Disparity Study Oversight Review Committee, which was established by “Executive Order 14-07.” The first recommendation addressed by the Committee:

Adequate Funding for the Office of Equal Opportunity (OEO) To Obtain Adequate Resources. The Committee report states “adequate funding for OEO, the first recommendation, is essential and, as such, is the top priority. It would be difficult if not impossible to achieve many of the other recommendations without such adequate funding.” Under Pearson’s direction, and with the support of OA Commissioner Doug Nelson, a strategic plan was created to use existing staff and resources at the Office of Administration to bring OEO staff to 5.5 full-time equivalent staff members (adding one part-time position) without using any additional funding from General Appropriation.

Since the 2014 Disparity Study there have been four OEO Directors, with an average tenure of less than two years. In addition to the Director, the Office has:

- 1.0 Deputy Director
- 3.0 Program Specialist positions located in Kansas City, St. Louis, and Jefferson City. The position in Jefferson City is vacant. The position in Kansas City has had significant turnover and the current employee has been there less than a month as of April 2022.
- 1.0 Senior Program Specialist, currently vacant.
- 0.5 Administrative Assistant, currently vacant.

Full Time Equivalent employees for both the workforce and supplier diversity programs is 6.5. By comparison, the City of Kansas City Missouri’s Civil Rights and Equal Opportunity has 30 FTEs. The Missouri Department of Transportation External Civil Rights Division has 13 FTEs.

Systems: Messaging, procedures and definitions are not consistent across State platforms.

OEO does not have a policy and procedures manual. Significant staff turnover and the resulting lack of institutional knowledge, paired with a financial management system from 1998, complicated historical analyses of the underlying data that was essential to this study.

The utilization amounts reported annually to the Governor and Legislature have not been consistently calculated. Current practice of calculating M/WBE utilization by department: (Total dollar value of M/WBE contracts) divided by (departmental expenditures less exempt object codes). This is an attempt to determine how much of a department's expenditures are subject to M/WBE utilization.

There is debate between the Office of Administration and other Executive Departments as to what that denominator should and should not include. The uniqueness of each agency's service offering, combined with the dynamics of each agency's contractual vs. discretionary expenditure needs, will determine what combination of expenditure transactions satisfy each situation. In an effort to provide an analysis that neutralizes these agency differences and makes the information more consistent and comparable among agencies, a simpler, less contentious approach would be to calculate M/WBE utilization in the same way as this and prior disparity studies have been commissioned to do:

(Total dollar value of M/WBE contracts) divided by (total dollar value of contracts *subject to M/WBE goals* awarded).

Goals: Measurements of M/WBE utilization success are not commonly understood and/or lack agreed upon definition.

Closely correlated with resources and systems, clearly stated goals and objectives are essential for program success. 1 CSR 10-17.050 "Minority and Women's Business Enterprise Participation in Procurement Process", upon which a detailed OEO policy and procedures manual could be developed, outlines procedures to encourage and facilitate utilization, including:

- The Office of Equal Opportunity (OEO) will provide assistance to Minority and Women's Business Enterprises (M/WBEs). Assistance provided may include, but is not limited to workshops, bid history and pricing abstracts, minority vendor registration, access to state agency procurement staff, inclusion in the M/WBE online directory, notification of bid opportunities to promote increased participation, and referrals to agencies that may provide specialized training or assist with financing and bonding issues.

- By collaborating with the Divisions of Purchasing and Facilities Management, Design and Construction within the Office of Administration, OEO will encourage participation in the procurement process and fairness in consideration of bids and proposals submitted by M/WBEs. Programs and procedures designed by OEO to accomplish these objectives may include providing diversity training for state procurement personnel; identifying minority and women personnel to serve on evaluation committees; closely reviewing the requirements for bonding; notifying M/WBEs of procurement opportunities online; and actively collaborating with executive branch agencies.
- By collaborating with the Office of Administration, Division of Purchasing, and the Division of Facilities Management Design and Construction, and executive branch agencies, OEO may work with agencies to assist in the achievement of the State's Annual Aspirational Program. OEO may also recommend to agencies solicitations in which M/WBE requirements may be appropriate; recommend that qualified M/WBEs be included on solicitation lists; and, when feasible, recommend structuring contracts to maximize potential M/WBE and small business participation.
- After the contract is established, OEO shall monitor the activity of the contractor to assure compliance with the M/WBE utilization stipulated in the contract and in accordance with applicable statutes and regulations. Contractors that fail to comply with their M/WBE contractual requirements may be considered in breach of contract and may be subject to the remedies in the contract and as otherwise allowable by law.
- OEO shall maintain statistics and issue periodic reports about M/WBE participation and recommendations for improvement.

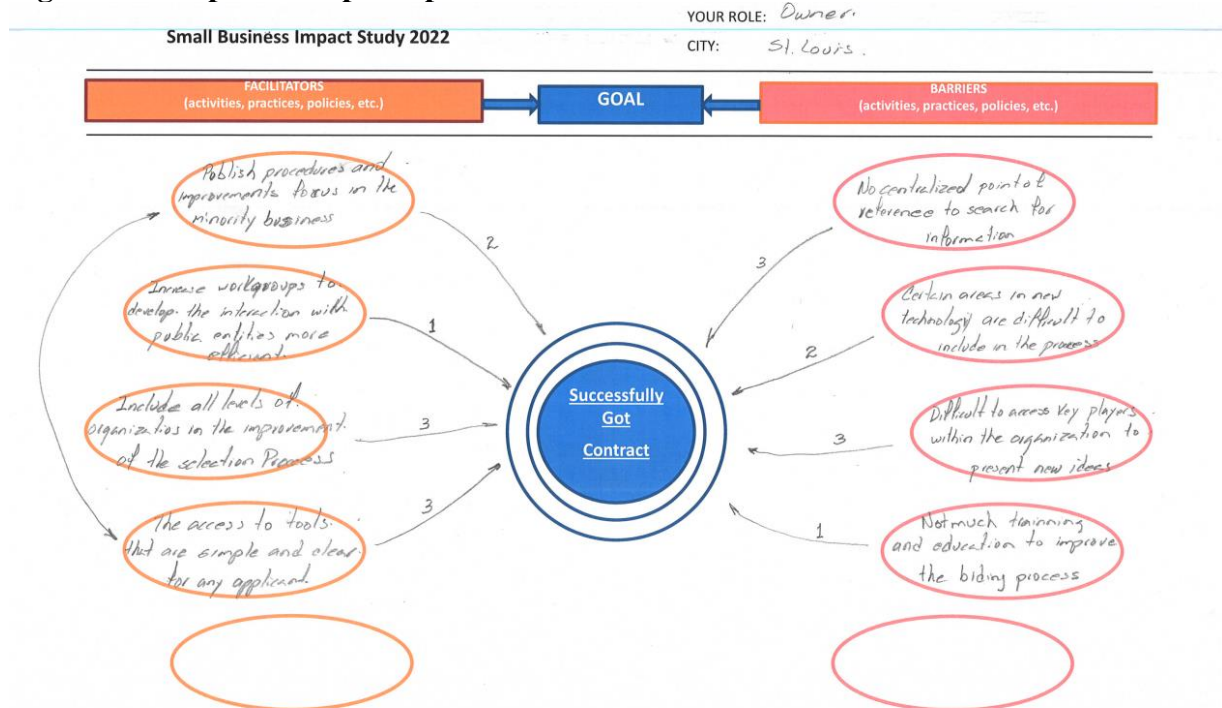
Currently OEO performs those items underlined above. In addition to periodic reports of utilization, a dashboard of program performance measures could be tracked and evaluated annually such as the number of good faith effort waiver requests; the number and dollar amounts of bids rejected as non-responsive for failure to make good faith efforts to meet the goal; growth in the number, size and scopes of work of certified firms; increased variety in the industries in which M/WBEs are awarded prime contracts and subcontracts; hours of diversity training provided to state procurement personnel; number of workshops offered to M/WBEs.

VI. Qualitative Evidence of Race and Gender Barriers in the Missouri Economy

Procedure

The UMKC-IHD research team conducted four in-person mapping sessions and one virtual mapping session via zoom with small business partners during the month of April 2022. Twelve participants participated in mapping sessions. Each person was presented with a blank map (see the map template in Figure 10), which they completed during a meeting facilitated by research team members. Before we began the mapping sessions, we ensured participants that their responses would be held confidential and asked for permission to record their responses for clarification purposes during the coding process. After obtaining consent, each session followed the same process. First, we reminded participants that the ultimate goal of the session is to explore the facilitators and barriers to them successfully getting a contract with the State of Missouri. Second, we asked participants to list between three to five activities, practices, or policies that facilitate attainment of a contract. Third, we asked participants to list between three and five activities, practices, or policies that created barriers to attainment of a contract. Participants were asked to limit their responses to a maximum of five to ensure that they chose the most important facilitators and barriers. Fourth, participants drew directional arrows between circles that represented a connection between concepts and the overall goal. Finally, participants rated the strength of each connection. Figure 10 is an example of a completed map.

Figure 10 Sample Concept Map



Participant Demographics

There was a total of 21 participants attended mapping sessions, 12 through in-person sessions, and nine via virtual sessions. The in-person sessions occurred in KCMO (24%) and St. Louis (33%). Over forty percent of the participants (43%) were from the Construction classification, 33% were from Goods and Services, and 19% did not provide a classification. Around twenty percent (19%) of the participants were in business five years or less, 48% were in business for five to 20 years, and 29% were in business for more than 20 years. In addition, participants also reported that 15 companies had less than ten employees (71%), and five companies had ten or more employees (24%).

Table 60: Characteristics of Small Business in Mapping Sessions

	N	%
Location		
In-Person: KCMO	5	23.8
In- Person: STL	7	33.3
Virtual	9	42.9
Industry		
Construction	9	42.9

	N	%
Goods and Services	8	38.1
Unknown	4	19.0
<i>Years in Business</i>		
≤ 5 years	4	19.0
5-20 years	10	47.6
>20 years	6	28.6
Unknown	1	4.8
<i>Number of Employees</i>		
<10 people	15	71.4
≥10 people	5	23.8
Unknown	1	4.8

Analysis of Maps

Coding

The IHD research team analyzed mapping data beginning with an item level analysis. Three members of the team read the maps and together developed a codebook based on relevant and recurring themes found in participants' responses. This process included discussions about the contents of the maps until we reached consensus on the names and definitions for individual codes. Once the codebook was complete, the 21 total maps were divided amongst two members of the research team. Each team member blindly coded all 21 maps, discussed with the other member to resolve discrepancies until the two of them reached 100% consensus on the codes on each map.

Analysis

Once the code list was complete, we entered the data into a "square adjacency matrix" with all the codes into an Excel-based program called FCMapper and then merged them to create a full matrix. We analyzed the data to determine the number of concepts identified by participants and the number of times each concept was used. We then measured the centrality, complexity and density of the maps.

Results

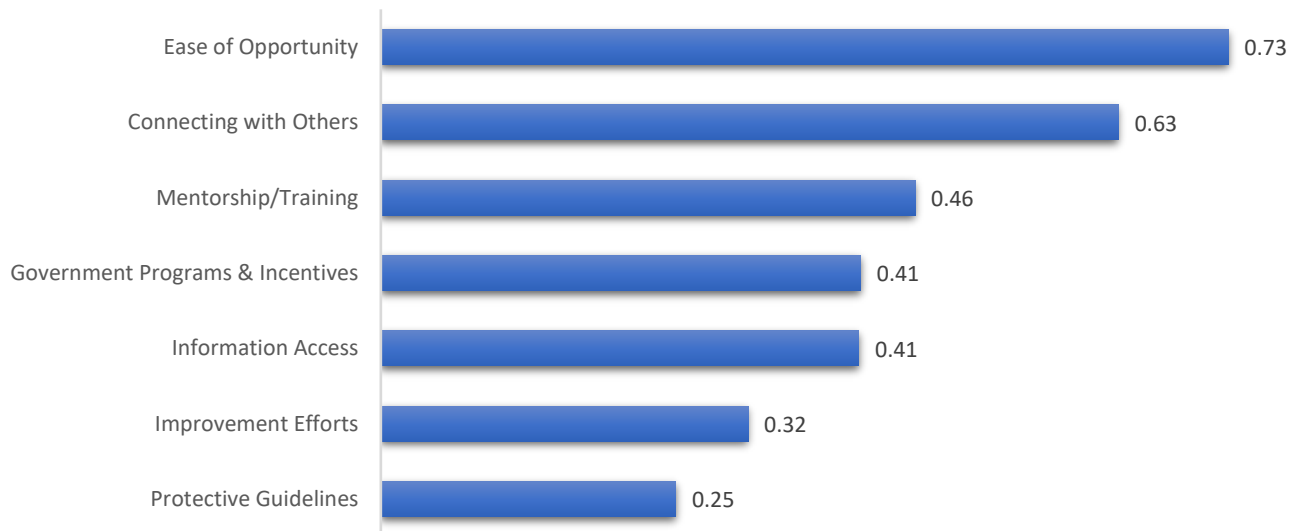
The facilitator concepts were ordered by their centrality. The contribution of a variable in a cognitive map can be understood by calculating its centrality, which shows how connected the variable is to other variables and what the cumulative strength/weights of these connections. In the Idea Mapping technique, a variable can be more "central" although it has fewer connections if the connections carry larger weights or are stronger (Kosko, 1986). Essentially, "the centrality of the variable is not only a frequency of

expression but also how important that variable is given the whole structure of the cognitive map.” (Özesmi, U., & Özesmi, S.L., 2004).

The top five impactful facilitators were:

1. Ease of Opportunities (0.73). Allows business to obtain contracts/bids easily and efficiently.
2. Mentorship/Training (0.63). Mentorship, training, and workshops, one-on-one assistance for completing bids and other needs, as well as knowledge sharing.
3. Connecting with Others (0.46). Communicating and networking with others, whether that is other business, other government agencies, customers, prime contractors, etc. things work better when these connections are facilitated and intentional.
4. Government Programs & Incentives (0.41). Ways governmental programs and agencies could or have assisted businesses to be successful.
5. Information Access (0.41). Improvements to information storage and access systems that would allow businesses to navigate the administrative process easier.

Figure 11 Ranked facilitators to small businesses

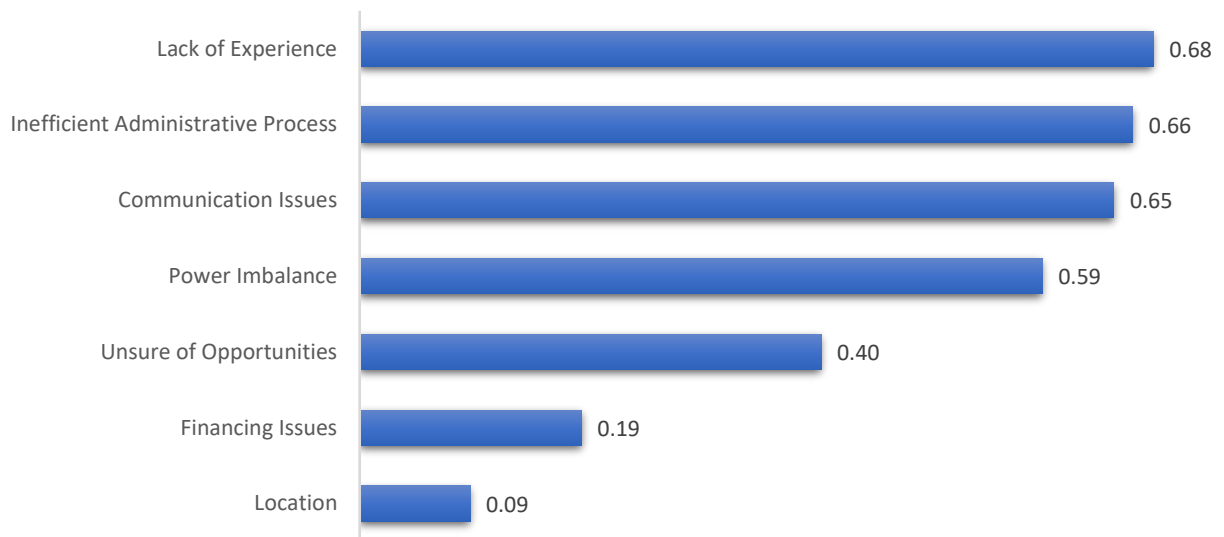


The barrier concepts were also ordered by their centrality (see Figure 12). The top five impactful barriers were:

1. Lack of Experience (0.68). Lack of experience in business or working with minority certified businesses.

2. Inefficient Administrative Process (0.66). Lengthy/excessive/confusing administrative process, not user friendly, not intuitive, or easy to use for first time users.
3. Communication Issues (0.65). Lack of communication/feedback, unable to know who to contact, limited access due to COVID.
4. Power Imbalance (0.59). Prime contractors have more power than subcontractors, minority certified businesses are more likely to be subcontractor and certification does not give businesses equal playing power.
5. Unsure of Opportunities (0.40). Opportunities best suited for the individual business, difficulty determining what contracts are still available.

Figure 12 Ranked barriers to small businesses



Focus Group and 1:1 interview participants had several comments regarding the barriers and facilitators to successfully obtaining a contract. This portion of the report includes selected comments, though anecdotal, that provide additional richness and clarity to the data presented above.

Participants explained that there are problems working with Prime Contractors.

Kerri (Jefferson City): “Primes who abuse the MWBE firms’ certification to win contracts and abuse the programs... they see that there’s an incentive for them to win extra points in the rubric for the RFP. So they bring in an M, or a WBE to help win the contract. And then they turn around, because they have access to in-house counsel or they keep attorneys on retainer, and they find all these ways to get you off the contract, or they try to force you into becoming a pass through which actually jeopardizes your certification because it’s a violation of the commercial useful function regulations.”

- Her personal example- “I had another one where this wasn’t in Kansas City. It was a St. Louis project. It was micro transit transportation that was a base two-year program or contract. They signed the contract with Bi-State Development and before I can even get my contract signed, they were filing with the procurement to get me off the project.”

Darci (STL): “I had been asked to subcontract with X Company and participated in completing the RFP. Once the Prime obtained the contract, we were removed from the contract and not allowed to participate. They essentially benefited from our minority status but ultimately, we did not get the work.”

John (1:1): “But it seems to be that we go through a process where people will sit there and say, well, you have to at least show that you made an attempt to go out and find minority partners for your contracts. And in the past, what I’ve seen is either nobody goes out (to search for those firms), but they listed a bunch of minority companies down that they’ve looked for through the database but nobody (minority companies) gets contacted on those contract opportunities.”

Marnee (1:1): “For me, it means that the RFP process is staged according to the compliance record of requirements for Minority Participation. When essentially time and time again, the excuse is there are not enough minority contractors and so it was not intended for minority participation. Instead, you and the Prime are going through the motions because the compliance required that you do so.”

Elizabeth (1:1): “...RFPs have an MBE or WBE requirement that’s quite helpful. If they use it - and sometimes they don’t. So, when they have the requirement, that’s helpful and when they don’t, it can be a pain.”

Elizabeth (1:1): “...you have to put up money sometimes to participate, sometimes they won’t pay you until a later date, like they’ll put in (the RFP) we’ll put you up to this percent, but then not the whole amount until later. And if you’re a sub, the prime will withhold as well. And so, it can affect cash flow.”

Business owners explained that technology was a barrier to accessing RFPs and responding to them.

JoyLynn (1:1): “I would love to have a database of NSN national staff members and technical requirements that is updated and free to access. There is a database that is not up to date and has a few technical requirements that’s only accessible if you pay and/or get a PTAC (Procurement Technical Assistance Center) to run it for you. But most of it comes back with nothing.”

John (1:1): “Being informed when RFPs are identified within your NAICS code. I feel like we go through the trouble of setting up all of your information through SAM, the site, there should be some type of resource or a notification that lets us know if certain bids in your area fall within your NAICS code.”

Jackie (1:1): “...creating a place to store general company information. It feels like every time we do a new request, we have to fill out that information every single time. So maybe having the general information to be able to put in the beginning to say if you want to store your W-9 or you want to store all this stuff in here, we can go ahead and keep that information for you so that you don’t have to submit that every time.”

Marnee (1:1): “They asked you for a lot of the documents. Those should be a part of a database particularly for your minority certification documents. All those things that they ask for, over and over again, if this is an open space for potential contractors with the State to apply, and they are registered within this portal, there should be a folder or a database that those documents that are constantly applied to each application to be stored.”

Kerri (Jefferson City): “There’s a lot of inconsistency of the use of the NAICS codes and the commodity codes... if you get all these alerts that everybody else gets and it’s based on these different NAICS codes, there’s not consistency of how they’re being used. You can spend a lot of time filtering through all these things and they’re not even really applicable so I’m gonna put that out there.”

Marnee (1:1): “It’s always a short window of opportunity to apply. Every now and again you’ll see a 30-day window but for the most part, it’s like two weeks on average for you to submit your application for as much as is required with the application process. It’s just really not enough time especially with the available technology.”

Business Owners explained that accessing information from staff was a barrier to completing RFPs or gathering information to prepare for a submission.

Nalini (0039): “Now, I contacted them a few of them by email and phone calls. No one returned my phone calls or emails, did a follow up, no response. So, I was actually very disappointed.”

Marnee (1:1): “There should be a technical support component for applicants particularly those who are new to the Missouri contracting system and who have never received an actual contract, perhaps a checklist, if you will, these are some of the common things that prevent an application from being pushed to the shortlist or here’s some common errors that we see.”

John (1:1): “The other thing that I mentioned was not knowing who to ask about the fulfillment of a contract. Yes, there are specific details about the contract inside of the contract, but then there’s a procurement officer and someone that you can contact but sometimes it’s not possible to... there may be a specific question, especially maybe with leasing that we need to speak with someone.”

Jackie (1:1): “But you can’t shop around to see if I’ve given you the best price but in fairness to this young lady, I just don’t think she was the project director for the state. I just don’t think she understood her job. She couldn’t get back with me on emails, she couldn’t tell me what number of things she wanted printed. I think she was a newbie, like we’ve got a lot of newbies in a lot of these positions now.”

Kerry (1:1): “...when you submit questions by the deadline, and if you don’t get the answers back until just before, you’re leaving very little time to make any changes or even sometimes decide if you’re even going to go through with the bid.”

John (1:1): “...it’s a confidence thing. I don’t have any confidence that the people who are actually running the DBE Program, who are actually telling us how we need to behave, that somebody is watching over them. And they are not behaving the way they tell us they want us to behave. They want things to be operational. So, there’s an inconsistency here and what’s being said (asked of WMBEs), and what’s being delivered (by staff).”

Business owners would appreciate more outreach from the State of Missouri to improve the likelihood W/MBEs are successful in obtaining a contract.

Kevin (1:1): “I would say partnering better with local agencies that help WBEs or MBEs, such as arch grants where there may be already a collaboration there.”

Jackie Coleman (0039): “Offering some kind of mentoring, worldwide technology. Partnering or mentoring, maybe that could help sell yourself and your company through some partnership.”

Colleen (Jefferson City): “One of the big ones for me is networking events... it introduced you to primes and then other folks in the industry, it gave other people an opportunity to get to meet you.”

Colleen (Jeff City): “DBE services... it was an outstanding program that connected prime contractors with subcontractors and also allowed people to work together on teaming opportunities.”

Linda (STL): “...if you’ve got experts that can actually help us and identify good resources for us to use, that’d be great.”

Linda (STL): “Introductions; anything you can do that gets me in the room with people who do the same kind of work I do, or who are giving opportunities out for the work that I do, that’s always helpful a name, a face, some way I can recognize them. And more importantly, they can recognize me if I do submit on something.”

Linda (STL): “Since we are mostly talking to women-owned firms, the updates on the small business size standards and other compliance rules that we have to be aware of is important because all of a sudden, we could be bumping up against the size standards or something could change and we’re not aware of it.”

Elizabeth (1:1): “And just like I mentioned on the facilitator, when an RFP has an MBE and WBE requirement that’s helpful, but it is a barrier when it doesn’t. And sometimes the state the procurement sometimes thinks things are inappropriate for putting the WBE and MBE to the contract, and I’ve been able sometimes to convince them that it should be there... The way the state does it, is it gets you more points in how they’re awarding bids.”

Elizabeth (1:1): “My advice to people who want to pursue a contract, is do it right away as soon as you incorporate because it’s kind of unfair for the established businesses to go back and get their WBEs because then they want all your history and all your tax returns and all this crap. Whereas if you’re a brand-new business, most of it is not applicable, because they don’t have that history yet.”

John (1:1): “Barriers, number one barrier is lack of visibility to opportunities. Okay, I have no place to go to. There’s a lot of emphasis on construction but I have no place to go to. I’ve gone through Missouri Department of Transportation training and they have 10 week classes that we go through and stuff like that. And when it comes down to it, I

asked the Department of Transportation, how do we go through and compete on these things when we're not construction companies and their comment is well, you need to contact 'the whatever' name of the profession, I can't remember what the name of that is. But basically, the one that does the contracting professional services, and yet I have no insight into what they're doing or how to really be involved in those things."

Businesses stated they experience rates of success at lower levels than Caucasian firms and that perhaps implementing WMBE program success standards would improve diverse participation.

Marnee (1:1): "I probably have submitted in a seven-year time period, maybe eight applications in response to RFPs. I did call and request feedback. And next, what I shared with you a little bit ago that she said "well you know we just kind of thought we were gonna go with the current contractor." "Oh what? Why did you put that RFP out there? Yeah, you're wasting folks time."

Kerri (Jeff City): "...when the RFPs come out, you can tell that they're written for larger companies and as a small business we have to piecemeal together a team to go in on a bid. I've actually stopped doing that, because I've never been awarded a contract that way. And usually, when I've done the debriefing what I learned is because they didn't live all under one house, they just set us aside because they didn't see us as a viable vendor because of that."

Elizabeth (1:1): "We've been burned before where a prime put us in there but their wording was wrong and the state disqualified giving them points for the WBE because of the way they worded it. They said we would do *up to* 5% but they didn't say we will do 5% and it ended up hurting us instead of the prime because the prime did not get any points for the WBE. But it turned out they didn't need it. And since they didn't get any points, they said 'we won't use you'."

John (1:1): "Because a lot of like I said, I just see a lot of proposal activity. And quite frankly, one of the things I can't do is I can't assess how competent the people who are the prime contractors are in the things that they're doing. They could be a new company, they could be a completely inexperienced company, but they're looking for a minority business to be added (to the proposal) in order to compete on something that they may not even be qualified for."

Focus Group and 1:1 interview participants had several comments regarding the barriers and facilitators to successfully obtaining a contract. This portion of the report includes selected comments, though anecdotal, that provide additional richness and clarity to the data presented above.

VII. Recommendations for the State of Missouri's Minority- and Woman-Owned Business Enterprise Program

The quantitative and qualitative data presented in this Report provide a thorough examination of the evidence regarding minority- and women owned experiences with State contracting procedures, specifically for firms operating in the state of Missouri's geographic market area and its industry markets. Funds from the American Rescue Plan Act for the State of Missouri, budgeted at \$3.1 billion for 2023, provide a unique opportunity for the State to renew and expand its commitment to this program.

The 2014 Study included 18 recommendations, four of which have since been implemented in part or whole (see Appendix G for a complete listing). Our findings affirm many of those prior recommendations. To compel more action, our recommendations include the necessary justifications for the State to modify policies, procedures and practices in order to achieve the stated goal: increase meaningful participation by socially and economically disadvantaged small business concerns and minority and women-owned business enterprises, directly or indirectly, in state contracting.

A. State Contracting and Procurement Policies and Processes

The courts require that Missouri use race- and gender-neutral approaches to the maximum feasible extent to meet the annual M/WBE goals. This is a critical element of narrowly tailoring the Program, so that the burden on non-M/WBEs is no more than necessary to achieve the program's remedial purposes. Increased participation by M/WBEs through race-neutral measures will also reduce the need to set M/WBE contract goals.

Increase assistance to M/WBEs including, but not limited to workshops, bid history and pricing abstracts, notification of bid opportunities to promote increased participation, networking and matchmaking efforts, and referrals to agencies that may provide specialized training or assist with financing and bonding issues.

Expand outreach and development to M/WBE. Supplier diversity is a core role of OEO, yet the results of the Utilization Study indicates that only 70.3% of State purchasing expenditures remaining with Missouri firms. This is a 10 percent decline from the previous Disparity Study, conducted in 2014, when 77.1% of contract dollars were paid to Missouri firms. A robust network of Missouri M/WBE vendors is essential in order to have a sufficiently competent and competitive pool for future contract actions.

Focus on regional outreach. The dispersion of purchasing actions across Missouri is highly divergent, with the Northeast, Northwest, Southeast, and Southwest regions all have \$0 allocated to MBE firms. While there is robust M/WBE participation in St. Louis, Central region, and to a lesser extent Kansas City, the allocation is skewed to be a small amount of large contracts.

Monitor the activity of the contractor to ensure compliance with the M/WBE utilization stipulated in the contract and in accordance with applicable statutes and regulations.

Invest in Information Technology infrastructure. The 2014 Study noted the following: “A critical element of this Study and a major challenge was data collection of full and complete prime contract and associated subcontractor records. Improved data gathering should be a major focus.” Our team experienced many similar barriers to the historical analyses of the underlying data essential to, and required by, this study. The current Information Technology system used for tracking MBE/WBE purchasing was implemented in 1998, with a technical backbone that is even older. Agency staff have difficulty in pulling timely data from the system both due to a lack of staffing to interact with the system as well as a complex interface. These challenges make the routine tracking and use of management data analysis to be daunting, ultimately resulting in sporadic, sometimes contradictory, purchasing data use reported across Agencies. The State is implementing a new IT system in the summer of 2022, providing an important opportunity to ensure and enhance participation of M/WBEs in state contracts and increase legal compliance. OEO should participate in the upgrade discussions to ensure that systems are seamless and contract information is tracked at the level of detail required to perform utilization and gap analyses.

B. M/WBE Program Elements and Procedures

The Study’s results support the determination that Missouri has a strong basis in evidence to continue to implement its M/WBE Program. M/WBEs in the state’s market area continue to experience significant disparities in their access to state contracts and private sector contracts and to those factors necessary for business success. These findings support the inference that discrimination remains a barrier to full and fair opportunities for all firms. We therefore recommend the continued implementation of the program.

Use the Study to Set the Overall Annual M/WBE Goals. The availability estimates should be the basis for consideration of overall, annual spending targets for state funds.

Invest in Office of Equal Opportunity Staff. The Office of Equal Opportunity (OEO) has two major statutory roles: Workforce Diversity and Supplier Diversity. OEO is severely understaffed to achieve these two roles. For example, supplier diversity requires more than the one staff member to be in the field to generate robust networks of potential MBE/WBE vendors, particularly in regions of the state where these networks do not currently exist. The lack of staffing also means that OEO has challenges in consistently interacting with Agencies in order to assist in developing potential M/WBE vendors, tracking contractor compliance, and engaging in cross-unit data collection and dissemination. OEO currently has highly competent staff, but without greater staffing, will not be able to drive State-wide change efforts around M/WBE participation.

Develop and Implement a Data Governance Policy. The Small Business Impact Study indicates that the State faces fundamental challenges in how it tracks and uses data regarding M/WBE vendors. A challenge for procurement professionals and OEO staff is the differing understandings of what data is to be collected, when it is to be collected, and how that data is to be used for management decision making. In particular, definitional questions around excludable purchases leads to results in Agencies communicating differing results around M/WBE participation. Purchasing professionals across State Executive Agencies must be trained in the current data governance policy regarding the

State of Missouri's Minority- and Woman-Owned Business Enterprise Program. Without this level of policy implementation across Agencies, it is difficult to create a common set of facts against which performance is to be measured at appropriate intervals.

Report beyond aggregate level; develop program success goals. Currently, Executive Agencies report to OEO aggregate levels of contracts with MBE and WBE vendors, both in dollar amounts and number of contracts. Greater granularity in the data being reported out can allow for program success goals. For example, a goal could be to increase WBE participation in a particular region for a particular Agency. These goals can allow for quick wins for Agencies while also targeting particular metrics that may be attainable in the short- to medium-term. In addition, this could serve to lower the anxiety that State professionals face in reporting a single bottom-line number by opening pathways for movement on program success goals, which in turn could increase incentives to report out to other Agencies. Other benchmarks could include the number of good faith waiver requests, the growth in the number, size and scopes of M/WBE firms, the increased variety in the industries in which M/WBEs are awarded prime and subcontracts, the number and dollar amounts of bids rejected as non-responsive for failure to make good faith efforts to meet the goal; hours of diversity training provided to state procurement personnel; number of workshops offered to M/WBEs.

Report across agencies. Currently the accounting and purchasing data processes are highly siloed with each Agency retaining the ability to pull data only for their purchasing actions. There is great value in being able to easily share data across Agencies in order to foster a greater understanding of challenges and opportunities in securing MBE/WBE vendors.

Report at greater cadency. Developing a quicker cadence for data collection and dissemination would allow Agencies to correct the flow of actions throughout the fiscal year. This allows data to become a tool for dynamic performance management rather than summative performance evaluation. The greater cadence would necessitate a simplified means of pulling the data and reporting results in order to lessen the burden on Agency staff.

C. Conclusion

The Study results fully support race- and gender-based measures to ensure full and fair access of all businesses to contracting opportunities with the State. Overall, we found extensive evidence that discrimination on the basis of race and gender continues to operate in Missouri's markets and that disparities exist between the availability of M/WBEs and their utilization on state contracts, as well as throughout the wider Missouri economy. In our judgment, the State has a strong basis in evidence to continue its M/WBE program and to employ narrowly-tailored remedies.

The State of Missouri's M/WBE Program is designed to encourage the participation of Minority- and Woman-Owned Enterprises in State purchases as both prime and sub-contractors. The results of the Small Business Impact Study have indicated a very mixed experience of potential vendors with State Agencies. The qualitative findings indicate that the owners of M/WBEs have experienced frustration with the technical nature of the

contracting process and the lack of assistance from State contracting professionals in navigating what potential vendors identify as being overly complex. Focus group and interview participants also indicate that being a successful vendor can lead to future success, highlighting the need to assist more available enterprises in successfully navigating the procurement process.

The Utilization Analysis and Statistical Analysis of Disparity indicate a strong need for the utilization of M/WBEs in key product markets, some with zero rates of utilization. In addition, in many of the same product markets there are zero available M/WBE firms indicating the need for investment in the development of potential M/WBE vendors, a process that should involve leveraging the work of regional universities, community colleges, the University of Missouri Extension, and entrepreneurship development programs such as Missouri SourceLink. Partnering with these organizations will require the investment in OEO staff that can embed themselves in such organizations to substantially partner in supplier-development activities.

Appendices

Appendix A: Supplemental tables and analysis

Contract Codes Missing NAICS Codes

Our analysis reveals nearly 2000 contract disbursements without a NAICS code associated in the Hoovers database. These embody in sum, 409 commodity codes and 376 distinct enterprises.

Category	Unique Observations
Disbursements	1972
Contract Numbers	767
Commodity Codes	409
Enterprises	376

Source: Analysis of Missouri Agency Data

MBE and WBE contractors, Number of Contracts and Dollar Amount Awarded

We provide a list of each MBE or WBE we are able to identify in the Final Contract File. We also provide a count of the number of contracts each enterprise received as well as the total dollar amount they received.

Enterprise	Number of Contracts	Dollar Amount Awarded
84 LUMBER COMPANY	1	3230.59
ABOVE ALL PERSONNEL	2	414478.76
AIM LABORATORIES LLC	3	116928.5
ALL ACCESS INTERPRETERS	1	157.25
AMERICAN RAMP COMPANY INC	1	85819.59
ARCHAEOLOGICAL RESEARCH CENTER	2	38622
ATHENA CONSULTING	1	3600
BETTER BY DESIGN LLC	1	30990
BUCKET MEDIA, INC	4	798510.31
BUTLER SUPPLY INC - FULTON	1	3632.14
C&B LIFT TRUCK SERVICE	2	8466
C&S BUSINESS SERVICES, INC	3	434328.87
CABLE DAHMER CHEVROLET LLC	7	1427121
COAST TO COAST EQUIPMENT &	1	4575
COMMUNITY RESPONSE INDEPENDENT	1	1550
COOLSOFT LLC	3	1667003.04
CR WILLIAMS & ASSOCIATES	1	10951.24

CRWILLIAMS & ASSOCIATES LLC	1	5708.75
CUSTOM MEETING PLANNERS OF	3	420083.59
ENGLAND & COMPANY CASE	6	2406740.13
EVOLV SOLUTIONS LLC	1	16006.52
FORD HOTEL SUPPLY COMPANY INC	2	55983.94
FORD RESTAURANT SUPPLY	2	195509.46
GATEWAY SECURITY SERVICE LLC	3	192775.08
GINI L TOYNE & ASSOCIATES INC	2	15005.73
GSM DEVELOPMENT LLC	1	38375
HATFIELD CLEANING SERVICES	2	129924.68
HUBER AND ASSOCIATES INC	12	7293723.5
INFORMATION RESOURCE GROUP	9	6427623.37
INNOVATIVE CLAIMS STRATEGIES	1	2125
K TAYLOR AND ASSOCIATES LLC	1	2187.5
MC JANITORIAL LLC	1	253693.7
MECHANICAL SOLUTIONS	1	10167.29
METRO MEDICAL EQUIPMENT &	2	19694.43
METRO OFFICE SOLUTIONS	1	104781.71
MICKES OTOOLE LLC	1	408616
MIDWEST ADVERTISING	4	86557.53
MT & ASSOCIATES LLC	3	26920.76
NEXTGEN INFORMATION SERVICES	1	2112902.91
OLIVETTI ENTERPRISES LLC	4	221086.2
PARAGON SOLUTIONS INC	1	12009.29
POOLE COMMUNICATIONS	1	5123.4
PRIMO REPORTING SERVICE	1	82
PROFESSIONAL ENVIRONMENTAL	3	94713.78
PTC LABORATORIES INC	2	1181726.7
R&W CONTAINER LC	4	117449.36
RITEWAY MAINTENANCE AND SUPPLY	4	289070.01
ROSE INTERNATIONAL	10	4941897.18
ROSE INTERNATIONAL INC	1	38488.78
RT FACILITY MANAGEMENT	2	4840.89
S & B HINNEN HAULING AND	2	5740.72
SAI INTERACTIVE INC	1	150000
SCHRIEFER'S OFFICE EQUIPMENT,	3	139302.24
SCOTTS CONCRETE	1	967.5
SCRUGGS GUHLEMAN LUMBER	4	41855.93
SEAGULL ENVIRONMENTAL	2	86047.2
SHI INTERNATIONAL CORP	7	4471398.35
STAT COURIER SERVICE INC	3	387160.97
SURECUT LAWN CARE LLC	1	13200

SYNERGY GROUP	1	92887.5
THE CHAD CARDEN GROUP	2	719850
THE KIESEL COMPANY	1	8535.41
TSHIBANDA & ASSOCIATES	2	2649659
TSI GLOBAL COMPANIES LLC	1	10544.19
TUETH KEENEY COOPER MOHAN &	1	54495
VANDIVER GROUP	1	114155
WOODLEY BUILDING MAINTENANCE	23	1813231.58
WORLD WIDE TECHNOLOGY LLC	5	46639788.8

Extensive Geography of Missouri State Contracting Dollars

State	Count	Total Spent	% Spent	Cumulative Spending
MO	5811	\$3,529,045,931.20	53.4%	53.4%
IL	988	\$990,347,987.98	15.0%	68.4%
TX	485	\$362,514,013.74	5.5%	73.9%
KS	243	\$339,000,506.42	5.1%	79.0%
CA	407	\$165,863,056.39	2.5%	81.5%
TN	74	\$164,647,132.54	2.5%	84.0%
MN	200	\$151,490,319.67	2.3%	86.3%
PA	403	\$112,345,240.62	1.7%	88.0%
NY	282	\$92,163,304.99	1.4%	89.4%
OH	150	\$85,349,214.69	1.3%	90.7%
VA	136	\$55,318,812.08	0.8%	91.5%
LA	10	\$50,569,747.16	0.8%	92.3%
MA	212	\$44,228,403.05	0.7%	93.0%
IA	113	\$42,728,056.11	0.6%	93.6%
MD	119	\$39,000,288.64	0.6%	94.2%
WI	148	\$37,105,108.25	0.6%	94.8%
UT	38	\$32,884,488.66	0.5%	95.3%
NC	197	\$30,772,613.89	0.5%	95.7%
GA	169	\$27,507,280.68	0.4%	96.2%
IN	68	\$25,977,207.49	0.4%	96.5%
ME	48	\$25,888,978.53	0.4%	96.9%
FL	235	\$25,029,456.03	0.4%	97.3%
KY	83	\$21,186,725.21	0.3%	97.6%
CT	68	\$19,035,352.70	0.3%	97.9%
NJ	115	\$17,924,457.26	0.3%	98.2%
AZ	94	\$16,733,566.14	0.3%	98.5%
MS	21	\$16,568,642.73	0.3%	98.7%
CO	53	\$14,820,280.92	0.2%	98.9%

WA	65	\$13,547,302.48	0.2%	99.1%
MI	70	\$11,716,170.44	0.2%	99.3%
OR	27	\$8,486,801.20	0.1%	99.4%
DC	22	\$5,820,977.51	0.1%	99.5%
AL	72	\$5,282,735.39	0.1%	99.6%
AR	86	\$4,807,331.84	0.1%	99.7%
DE	13	\$3,015,133.01	0.0%	99.7%
NV	8	\$2,553,134.44	0.0%	99.8%
SD	20	\$2,476,048.06	0.0%	99.8%
MB, Canada	15	\$2,437,274.50	0.0%	99.8%
OK	47	\$1,979,727.32	0.0%	99.9%
NE	32	\$1,945,609.00	0.0%	99.9%
Dublin, Ireland	4	\$1,895,770.00	0.0%	99.9%
ON, Canada	20	\$1,695,735.12	0.0%	100.0%
NH	13	\$581,739.70	0.0%	100.0%
NS, Canada	5	\$548,076.87	0.0%	100.0%
BC, Canada	4	\$482,089.70	0.0%	100.0%
SC	17	\$473,178.86	0.0%	100.0%
WY	3	\$347,969.50	0.0%	100.0%
VT	6	\$253,935.27	0.0%	100.0%
ID	2	\$171,686.05	0.0%	100.0%
RI	6	\$157,018.26	0.0%	100.0%
MT	3	\$74,468.10	0.0%	100.0%
NM	2	\$62,000.00	0.0%	100.0%
WV	3	\$51,731.00	0.0%	100.0%
HI	2	\$32,000.00	0.0%	100.0%

Appendix B: Small Business Map Code Book

Codes	Definition
Facilitators	
Connecting with Others	Communicating and networking with others, whether that is other businesses, other govt agencies, customers, prime contractors, etc. Things work better when these connections are facilitated and intentional.
Ease of Opportunity	Something that allows businesses to obtain contracts/bids easily and efficiently.
Government Programs & Incentives	Ways governmental programs and agencies could or have assisted businesses to be successful.
Improvement Efforts	Steps that would be beneficial to improve the current processes that businesses go through when getting their WBE/MBWE certifications. Some of these are directly helpful for the businesses themselves, and some items are things that should be done at a governmental level.
Information Access	Improvements to information storage and access systems that would allow businesses to navigate the administrative process easier.
Mentorship/Training	Mentorship, trainings, and workshops; one-on-one assistance for completing bids and other needs; knowledge sharing.
Protective Guidelines	Guidelines, rules, or laws that protect or help those businesses with certifications.
Barriers	
Communication Issues	Lack of communication/feedback, unable to know who to contact, limited access due to COVID.
Financing Issues	Delays in payment, credit line issues, experience with estimations/bidding process.
Inefficient Administrative Process	Lengthy/excessive/confusing administrative process, not user friendly, not intuitive or easy to use for first time users.
Lack of Experience	Lack of experience in business or working with minority certified businesses
Location	It's difficult to get business when there are contracts in far out or rural locations
Power Imbalance	Prime contractors have more power than subcontractors, minority certified businesses are more likely to be subcontractor and certification does not give businesses equal playing power

Unsure of Opportunities	Don't know where to go for opportunities, or the opportunities best suited for the individual business, difficulty determining what contracts are still available
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Appendix C: 2014 Disparity Study Recommendations Review

Implemented

Race and gender neutral:

- augmenting program staff (added .5 FTE in 2015)
- lengthening solicitation times (firms can request more time)
- increasing access to information about state procurement processes and upcoming opportunities (Missouri Buys)
- quick pay policy

Not Implemented

Race and gender neutral:

- additional networking, outreach to M/WBEs and matchmaking efforts;
- reviewing contract sizes and specifications and qualification requirements to reduce barriers to the participation of small firms;
- adopting a small business set aside component;
- gathering information on the costs of all subcontractor bids to ensure competitiveness and non-discrimination;
- small business set aside
- small contractor bonding and financial program
- spend analysis of informal expenditures, such as those made with P-cards or on purchase orders to determine the utilization of certified firms;
- monitoring contract performance and compliance with contractual commitments;
- improved data collection and monitoring systems
- develop quantitative performance measures for overall success of the program.

Program specific:

- setting the state's aspirational goal at 10 percent for MBEs and 10 percent for WBEs
- adopting a Mentor-Protégé Program;
- working with other entities to provide technical assistance and supportive services to M/WBEs and other small firms;
- narrowly tailor program eligibility
- adopt personal net worth and size limits for eligibility;
- standardizing the program's implementation across state agencies;
- providing training to vendors and staff on the program;

Appendix D: MBE and WBE Contractors, Number of Contracts and Dollar Amount Awarded for FMDC Sample

Below you will find the vendor name, number of contracts for that vendor, and then the total dollar amount awarded to the vendor. Note that a single vendor may have several names. The Team did not update names drawn from contract documents unless they represented minor grammatical changes (i.e., Company to Co.).

Vendor Name	Contracts	Dollar Amount Awarded
American Pride Hauling, LLC	1	\$255,400.00
Arcturis	1	\$5,960.00
Brand Construction	1	\$28,000.00
Civil Design	1	\$23,039.00
Crossroads Roofing & Contracting, LLC	1	\$73,450.00
Division 7, Inc.	1	\$206,966.56
Double S Dirt Works, Inc.	1	\$241,490.75
Family Business Properties	4	\$73,000.00
Firelake Construction	1	\$23,985.00
FSC, Inc	1	\$102,250.00
G & T Construction	1	\$44,000.00
Helix	1	\$15,707.50
HJM Architects	1	\$53,440.00
Home for Good, LLC	1	\$9,875.00
Jones Family Supplies	1	\$27,500.00
Midwest Construction Services and Products, LLC	1	\$9,500.00
Millennium Engineering & Sales, Inc.	1	\$11,950.00
Modern Interiors	1	\$120,500.00
Odimo	1	\$8,925.00
Premier Demolition	1	\$94,200.00
Rhodey Construction	1	\$2,808.00
Select Steel Service	1	\$8,245.00
St. Louis Glass	1	\$18,125.00
Strata Architecture Inc.	1	\$82,691.16
T.A.B. Company, Inc.	1	\$14,036.50
TSI Global Companies, LLC	1	\$780,259.00
Verslues Construction Co, Inc	1	\$798,000.00

Appendix E: Legal Table of Authorities

Cases	Pages
<i>Adarand Constructors, Inc. v. Pena</i> , 515 U.S. 200 (1995).....	5
<i>Adarand Constructors, Inc. v. Slater</i> , 228 F.3d 1147 (10th Cir. 2000)	8
<i>Associated Gen. Contractors of Am. v. California Dep’t of Transp.</i> , 713 F.3d 1187 (9th Cir. 2013)	5, 8, 9
<i>Associated Gen. Contractors of Am. v. City of Columbus</i> , 936 F. Supp. 1363 (S.D. Ohio 1996)	9
<i>City of Richmond v. J.A. Croson Co.</i> , 488 U.S. 469	<i>passim</i>
<i>Dynalantic Corp. v. United States Dep’t of Defense</i> , 885 F.Supp. 23 237 (D.C. Cir. 2012).....	8
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<i>Faust v. Vilsack</i> , 519 F. Supp. 3d 470 (E.D. Wisc. 2021)	11
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<i>Hazlewood School District v. United States</i> , 433 U.S. 299 (1977).....	9
<i>Innovative Polymer Techs., LLC v. Innovation Works, Inc.</i> , No. CV 17-1385, 2018 WL 1701335 (W.D. Pa. Apr. 6, 2018)	5, 6
<i>Kossman Contr. Co. v. City of Houston</i> , No. H-14-1203, 2016 U.S. Dist. LEXIS 36758 (S.D. Tex. Mar. 22, 2016)	11, 12
<i>Linda Constr. Inc. v. City of Chicago</i> , No. 15 C 8714, 2016 WL 4429893 (N.D. Ill. Aug. 22, 2016)	6
<i>Mark One Electric Co., Inc. v. City of Kansas City</i> , 2021 WL 83463 (W.D. Mo. Jan. 11, 2021)	13

<i>Meland v. Weber</i> , No. 2:19-CV-02288-JAM-AC, 2021 WL 6118651 (E.D. Cal. Dec. 27, 2021)	7
<i>Midwest Fence Corp. v. United States Dep’t of Transp.</i> , 840 F.3d 932 (7th Cir. 2016)	3, 5, 7, 11
<i>Mountain West Holding Co., Inc. v. State of Montana</i> , 691 Fed. Appx. 326 (9th Cir. 2017).....	12
<i>Parents Involved in Cmty. Sch. v. Seattle Sch. Dist. No. 1</i> , 551 U.S. 701 (2007).....	1
<i>Rothe Development, Inc. v. United States Department of Defense</i> , 836 F.3d 57 (D.C. Cir. 2016)	5, 8
<i>Shaw v. Hunt</i> , 517 U.S. 899 (1996).....	5
<i>Staco Elec. Constr. Co. v. City of Kansas City, Missouri</i> , No. 4:20-CV-00165-DGK, 2021 WL 918764 (W.D. Mo. Mar. 10, 2021)	12, 13
<i>United States v. Paradise</i> , 480 U.S. 149 (1987).....	11, 12
<i>United States v. Salerno</i> , 481 U.S. 745 (1987).....	2
<i>Vitolo v. Guzman</i> , 999 F.3d 353 (6th Cir. 2021)	<i>passim</i>
<i>Western States Paving Co. v. Washington State Department of Transp.</i> , 407 F.3d 983 (9th Cir. 2005)	2, 6
<i>Wynn v. Vilsack</i> , 545 F. Supp. 3d 1271 (M.D. Fla. 2021).....	2, 5, 6

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Glossary

ACS: The American Community Survey. The Census Bureau's ACS is an ongoing survey covering the same type of information collected in the decennial census.

FMDC: Department of Facilities Management Design and Construction, Office of Administration. Entity responsible for Chpt. 8 purchasing actions.

MBE: Minority-Owned Business Enterprise.

MSA: Metropolitan Statistical Area, as defined by the federal Office of Management and Budget.

M/W/DBE: Collectively, Minority-Owned Business Enterprise, Woman-Owned Business Enterprise, and Disadvantaged Business Enterprise.

MoDOT: Missouri Department of Transportation.

NAICS: North American Industry Classification System. The standard coding system for classifying industry-based data in the U.S.

OA: State of Missouri's Office of Administration.

OEO: Office of Equal Opportunity, the entity responsible for administering the M/WBE program.

WBE: Woman-Owned Business Enterprise.